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THE PROBLEMATICAL FIND OF ANCIENT BRITISH AND GAULISH COINS FROM 'NEAR PORTSMOUTH' IN 1830

PAUL ROBINSON

IN 1830 a major find of Ancient British and Gaulish coins appears to have been made 'near Portsmouth.' (Some sources record the find-spot as 'at Portsmouth' or plainly 'Portsmouth' but these are casually written simplifications of 'near . . .'). The find was briefly summarized by Derek Allen as hoard no. 38 in his 'Conspectus of Principal Hoards'¹ and its importance is illustrated by the fact that it was included in this listing of hoards which included gold coins even though there was no record of any such coins in the find. Subsequently, Allen suggested that the coins 'found at Portsmouth, Hampshire' may not have come from a hoard.² Although he did not give his arguments for this, it is not difficult to guess them. Some of the Icenian coins in the British Museum and ticketed as from the hoard date well after the Roman Conquest and are unlikely to have occurred in a normal currency hoard in conjunction, *inter alia*, with Armorican coins associated in date rather with the middle of the first century BC. Possibly Allen was envisaging the 'hoard' as rather a series of votive deposits at a Late Iron Age or early Romano-British shrine (as that at Hayling Island) and comparable with the coin series from the religious sites at Farley Heath in Surrey and at Harlow in Essex. In spite, however, of these expressed doubts, the find was more recently included in Commander Mack's listing of hoards containing Iron Age coins found in England, as hoard no. 12.³

Allen's summary of the find was based upon some minor published references to it which are listed in his paper, and upon a group of coins preserved in the British Museum and provenanced as 'found at Portsmouth in 1830'. It is, incidentally, only the tickets to these coins which provide any indication of when the find was made. The purpose of this paper is to summarize and assess these and other printed sources to the find and to publish here some additional sources for it.

The principal source cited by Allen and Mack is the group of nine coins in the British Museum said to have been found at Portsmouth in 1830. Sadly, the donor's name is not recorded and they lack a registration number, showing that they were acquired before 1837-40 when registration of coins began. They appear to be the only extant group of coins purporting to come from the hoard and were described by Allen as 'no doubt a representative selection from a larger hoard'. The coins are:

1. Durotriges \mathcal{A} R stater (Mack 317), ill. E. Hawkins, *The Silver Coins of England* (3rd edn., 1887), pl. I, no. 5.
2. Durotriges \mathcal{A} R quarter-stater (Mack 319).

¹ D. F. Allen, 'The Origins of Coinage in Britain: A Re-appraisal', *Problems of the Iron Age in Southern Britain*, ed. S. S. Frere (1958), Appendix III.

² 'The Coins of the Icenii', *Britannia*, i (1970), 31.

³ R. P. Mack, *The Coinage of Ancient Britain* (3rd edn., 1975), p. 170.

3. Durotriges 'thin silver' series (Mack 321).
4. Baiocasses billon stater (Bib. Nat. 6978 etc.), ill. Hawkins, op. cit. pl. I, no. 13.
- 5–7. Baiocasses billon staters (Bib. Nat. 6978 etc.).
8. Icenī Æ unit with ED legend (Mack 423), ill. John Evans, *The Coins of the Ancient Britons* (1864), pl. XV, no. 12, and Beale Poste, *The Coins of Cunobeline and of the Ancient Britons* (1853), p. 102, no. 3.
9. Icenī Æ unit with ECEN legend (Mack 424).

There is a further Durotrigian silver stater in the British Museum *ex* John Evans's collection and described as 'from Portsmouth'. Allen accepts this as from the same find but the source from where Evans acquired the coin is not, unfortunately, recorded.

A more important source for the find, not cited in *Origins*, is a brief summary of it given by the collector James Dodsley Cuff to John Yonge Akerman and published by the latter in a footnote to a paper 'The Coinage of the Ancient Britons':⁴

A few years since a parcel amounting to nearly 100 coins in silver and mixed metal were found near Portsmouth. They for the most part resembled those given by Ruding Plate 3 nos. 46, 47, 49, 50, 51, 52 and Plate 2 nos. 32, 33 and 34. Mr. Cuff who communicates this observes, it is worthy of remark that not one of them has the androcephalous horse.

'Mixed metal' in this context must refer to the very base silver of which Armorican coins were made. Thus no gold coins were present in the find and we may see that the stater of Verica, *SCBI Copenhagen I*, no. 13, which was 'found near Portsmouth' and which has a pedigree going back to before 1873, should not be associated with the hoard.

Cuff was perhaps the major private collector of his day. There is no difficulty in accepting that he had the opportunity of seeing the find in its complete state as is inferred in the footnote above, and that his summary may be treated as reliable. In fact, however, the footnote cannot be correct as it stands: Akerman must have misunderstood Cuff's original communication, for the coins referred to on plate 2 of Ruding are all of gold while coin no. 32 on that plate does depict on the reverse a human-headed horse. That coins on plate 3 are mentioned before those on plate 2 suggests that in his original communication to Akerman, Cuff had intended merely to indicate that coins of the type of those listed on plate 3 were present in the find, while the coins on plate 2 were possibly introduced for purposes of comparison or to elucidate on point of detail in some way. Accepting this, it may be seen that, according to Cuff, the chief coins present in the find were

1. Coriosolitae billon stater, class II (as Ruding pl. 3, 50).
2. Coriosolitae billon stater, class III (as Ruding pl. 3, 49).
3. Coriosolitae billon stater, class VI (as Ruding pl. 3, 46 and 47).
4. Coriosolitae ? billon quarter-stater, class ? (compared with Ruding, pl. 3, 51).
5. Durotriges Æ stater, Mack 317 (as Ruding pl. 3, 52).

Two points should be briefly noted. It may not be assumed that the quarter-stater was of the same class as that given in Ruding. Cuff was obliged to restrict his parallels solely to Armorican coins illustrated in that work, and this was the only quarter-stater illustrated there. Strictly one should say only that billon Armorican quarter-staters of

⁴ *Numismatic Journal*, i (1846), 221.

uncertain tribes and of uncertain types were present. But that—according to Cuff—the full staters were of the Coriosolitae, suggests that it is likely that the quarter-staters were issued by the same tribe. Secondly, it should be noted that the class VI stater of the Coriosolitae does depict the man-headed horse on the reverse. It is not, however, clearly visible upon coins no. 46 and 47 of Ruding's plate 3 and is, indeed, either frequently heavily schematized so that the head is difficult to recognize as human, or is off the flan of the coin. In spite of this, however, some doubt must remain that coins of class VI of the Coriosolitae were indeed present or that the coins intended were perhaps struck by another tribe.

Cuff and Akerman, by their use of the word 'parcel', imply that the find was a hoard. This would appear to be supported firstly by the fact that a few types apparently predominated amongst the coins he lists—unlike the site accumulations at Farley Heath and Hayling Island—and, secondly, as the coins are broadly contemporary and are types known to have been found together in the Le Catillon hoard.

The summary given by Cuff contradicts the evidence of the parcel of coins in the British Museum in two major respects. Firstly, there is no mention of Icenian coins—even if only a small proportion had been included among the coins seen by Cuff it is highly likely that he would have referred to them. Such coins would, as has been mentioned above, be chronologically out of place in the find; they are not the sort of coin one would expect to find in a mixed-coin hoard in central southern England; no examples of Icenian coins have as yet been recorded from Hayling Island⁵ and there are very few with convincing provenances from either central southern England or the south-west. One may happily see them as intruders in this group.

Secondly, the four coins of the Baiocasses in the British Museum all show the man-headed horse on the reverse contradicting Cuff's categorical statement that no coins with this motif were present. Since there is no reason for believing that Cuff saw a portion of the find from which coins of the Baiocasses had been abstracted, it must follow that these coins also are intrusive and that while they may derive from a hoard, it is not that from 'near Portsmouth' as known to Cuff. The belief that they are intrusive is to some extent corroborated by the fact that the Icenian coins cannot belong to the hoard.

Of the remaining coins in the British Museum group there are otherwise no *a priori* grounds for not considering them from the find. Coins of type Mack 321 were found in the Le Catillon hoard as were Durotrigian quarter-staters of type Mack 319, and these one might well see as genuinely constituting minority elements in the parcel seen and described by Cuff. Several examples of both types are also recorded from Hengistbury Head, Hants, and thus may happily be seen as occurring in another Hampshire find.

A further major source for the discovery occurs in a grangerized copy of the Revd. Rogers Ruding's *Annals of the Coins of Britain and its Dependencies* (1819) in the possession of Messrs. Spink & Son.⁶ One interleaved sheet carries the central heading in the hand of J. D. Cuff (who owned the book at one time): '3 silver coins found near

⁵ Inf. from Dr D. Nash.

⁶ I am grateful to Patrick Finn for giving permission on behalf of Messrs. Spink & Son to publish this reference here. The medieval annotations to the volume were dis-

cussed by C. E. Blunt, 'Grangerized Copies of Ruding's *Annals*', Spink's *Numismatic Circular*, lxxxiv (1976), 226–7.

Portsmouth in 18 with many others [*sic*] and the three coins illustrated beneath it, drawn by a not very competent artist, are as follows:

1. Central southern England \mathcal{R} type with CRAB legend (Mack 371). Now in British Museum *ex* J. D. Cuff collection. Illustrated in Hawkins, *op. cit.*, pl. I, no. 12 and Evans, *op. cit.*, pl. V, 3. Evans describes the coin as 'found near Portsmouth' and quotes for this a source which appears to be this grangerized volume of Ruding.
2. Durotriges \mathcal{R} quarter-stater (Mack 319).
3. ? Central southern England \mathcal{R} uninscribed. (New type not listed in Mack, Evans, and Allen.) Probably the coin illustrated in Hawkins, *op. cit.*, pl. I, no. 17.



At first glance it would seem difficult to accept this drawing as depicting either an Ancient British or a Gaulish coin. The obverse head is reminiscent of those on the Saxon sceatta series and the reverse could also be located within that series accepting the limitations of the drawing. Dr J. P. C. Kent has suggested (in a personal letter to the writer) that the coin might be related to Brooke type 32b in the series. However, if the reverse is turned 90° clockwise it may be seen that the drawing is apparently a poor rendering of a coin illustrated by Hawkins (see above). It was described there as of base silver but neither its owner nor find-spot were named. Evans stated that the coin was from Gaul. While no other exact example appears to be known, a fair parallel to the reverse design, which appears to be a horse with raised hind quarters and with several additional 'leg ornaments', is now known from the excavations of the Iron Age shrine at Hayling Island (information kindly given by Dr D. Nash). Consequently, it seems reasonable tentatively to see the coin as the product of a mint in central southern England, possibly on the south coast.

The coins should not be seen in any way as a sample but perhaps as selected rarities present in it. It should be remembered that Durotrigian quarter-staters are fairly scarce today and that few were known before 1850.

Directly beneath these drawings, three further pairs of drawings of obverses and reverses of Icenian silver coins have been pasted on to the page. They are by a different, more competent artist and bear the initials of the collector William Brice by profession a Bristol solicitor. The three coins are:

1. Icenian, boar/horse type 3 (Mack 409).
2. Icenian, pattern/horse type ECE legend = second ECE series with horse stepping right (Mack 426).
3. Icenian, face/horse type 3 (Mack 413).

These are the only other drawings on the page and their proximity to the first group suggests strongly that the inserter had intended it to be understood that the three Icenian coins had also come from 'near Portsmouth'. While they might be held to support the evidence of the British Museum group of coins that Icenian coins were

present in the find they rather reinforce the evidence that the intrusive element in the find is larger than one might expect.⁷

Apart from the three coins in the grangerized Ruding above, curiously only two other coins from the find may be traced to the collection of Cuff. These are the two Durotrigian staters described as 'found at Portsmouth' which formed part of lot 187 in the sale of his collection at Sotheby etc. 8 June 1854, and which were purchased by Webster. Cuff was by profession an employee of the Bank of England but came from Corsley, near Warminster in Wiltshire, and retained a house there. Two further Durotrigian staters of the same type, Mack 317, appeared in lot 961 of the sale of the collection of C. W. Loscombe (of Pickwick, Corsham, Wiltshire) in 1855, and were described in the catalogue as 'found at Portsmouth'. A silver coin of uncertain type, 'found near Portsmouth' with *obv.* side face to right, *rev.* figure of a horse and altogether 'of very rude work', appeared in lot 25 in the sale of the collection of the Revd. T. F. Dymock (of Hatch Beauchamp, Somersets.) at Sotheby etc. on 1 June 1858. It cannot be coincidence that the four collectors—Dymock, Cuff, Loscombe, and Brice—who are known to have had coins from the find in their collections lived in the west country and it seems quite likely that the coins from the find were dispersed at somewhere such as Bath or Bristol.

The Durotrigian staters in the collections of Cuff and Loscombe suggest that this coin was present in the find in greater proportions than the other evidence might suggest, but this is not difficult to accept. It may be noted that references are all to coins of silver and that no struck or cast bronze Durotrigian staters are mentioned, suggesting further that one is dealing with a hoard rather than a site accumulation of coins and that it was probably concealed in the earlier period of the development of the Durotrigian coinage.

The Durotrigian staters and quarter-staters, the 'thin silver' coin (Mack 321) and the coins of the Coriosolitae all suggest that the Portsmouth find is closely comparable to the Le Catillon hoard, whose date of deposit is placed in the 50s BC. There is no published evidence for the dating of the uninscribed silver coin, the third in Cuff's group. The CRAB series, however, has been dated to the beginning of the first century AD and 'not earlier than the latter part of Tincommius'⁸ reign', thus presenting difficulties of either dating or interpreting the find. However, it is surely significant that Cuff allowed the coin to be published in Hawkins *Silver Coins* (1841) and later passed it to the British Museum without giving the information that it came either from 'near Portsmouth' or from the hoard. This silence suggests that he may subsequently have had reason to believe that the coin was not from the hoard and was possibly not even a stray find from 'near Portsmouth'. The coin may then, tentatively, be disregarded.

If this is so, then it is yet more disturbing that this further small group of coins has been contaminated by the addition of coins not with the same find-spot. The giving of spurious provenances to objects was a serious problem for mid-nineteenth-century collectors of antiquities: A. W. Franks discussed this at some length in a paper read before the Society of Antiquaries on 16 December 1858.⁹ It is not difficult to see that an

⁷ William Brice had also been deceived into purchasing for his collection a number of the notorious forgeries by Emery (Blunt, loc. cit. 226).

⁸ D. F. Allen, 'The Belgic Dynasties of Britain and

their Coins', *Archaeologia*, xc (1944), 37 and chart, 44.

⁹ *Proceedings of the Society of Antiquaries of London*, iv (1858-9), 246-50.

unscrupulous dealer might find it more easy to sell common Icenian silver coins (and coins of the Baiocasses) to collectors in the west country by pretending that the coins had a find-spot in the south of England. If this is so, then the question arises, how much of the remainder of the hoard—if such it really is—can be accepted as genuine: might perhaps the entire find be a concocted one with the coins of the Coriosolitae seen by Cuff coming in fact from an early hoard found in the Channel Islands? There is, it may be noted, no contemporary local record of the find. One may not be positive when dealing with negative evidence in this way, but the third coin in Cuff's small group of three coins may be felt to tip the balance in favour of an English find-spot as the only recorded comparative example comes from Hayling Island, not far from Portsmouth.

In conclusion then, the 'near Portsmouth' hoard may be summarized as follows: about 100 coins said to have been found of the following types: Durotriges \mathcal{R} staters (Mack 317), 6 + (BM, Cuff and Loscombe collections); \mathcal{R} quarter-staters (Mack 319), 2 + (BM, and Cuff); Hants thin \mathcal{R} series (Mack 321), 1 (BM); uninscribed \mathcal{R} from southern England (Mack —; Evans —), 1 (Cuff); Coriosolitae billon staters, classes II, III, and perhaps VI, large numbers (reported by Cuff); billon quarter-staters probably of the Coriosolitae, possibly more than one (reported by Cuff); uncertain, \mathcal{R} coin in the Dymock collection.

Coins of the Iceni and of the Baiocasses (BN 6979 etc.) and the inscribed CRAB coin (Mack 371) have at different occasions also been described as from the hoard almost certainly incorrectly.

A CAROLINGIAN *DENARIUS* WITH A DEVONSHIRE PROVENANCE

MICHAEL DOLLEY AND NORMAN SHIEL

A WHOLE indiction ago a paper sought summarily to list recorded insular findings of coins struck in the period *c.* 750–*c.* 1050 for the Frankish dynasts ruling western Europe from the Baltic as far south as the Pyrenees and the Appenines.¹ From Wessex the tally was quite exiguous, and for practical purposes did not extend beyond an obolus ('halfpenny') of Lothaire II (855–69) found at Pin's Knoll, Litton Cheyney in Dorset (Nat. Grid 541905)—in part the occasion of that paper—and perhaps two denarii ('pennies') from the first half of the ninth century occurring in the 1774 hoard from Trewhiddle near St. Austell in Cornwall.² That a useful addition can now be made is due to the courtesy of the Revd. R. S. Chalk, MA, the retired Rector (1959–75) of Stoke Fleming, who is the possessor of a denarius in the name of Charles the Bald (840–77) and struck at Melle in Aquitaine just under forty miles to the south-west of Poitiers.



The coin is one that came to him in 1920 after the death of his maternal grandfather the Revd. Joseph Heald Ward, MA (1839–1920), sometime Rector (1869–1894) of Gussage St. Michael, Dorset, and later Rector (1894–1909) of Silverton, Devon. Mr Ward, as befitted a correspondent during his Dorset days of Sir John Evans (1823–1908), kept meticulous records of the provenances of such coins, mostly Roman, as had been found locally and added by him to a modest collection which reflected a very wide range of scholarly interests. It was during the Silverton incumbency that there was acquired—and presumably found—the Charles the Bald denarius that is the subject of this note. It was described on the original envelope now mislaid as 'Charlemagne. Found at Culm Davey', and this provenance is further

¹ (R. H.) M. Dolley and K. F. Morrison, 'Finds of Carolingian Coins from Great Britain and Ireland', *BNJ* xxxii (1963), 75–87.

² *Ibid.*, p. 79, 9.

vouched for by a note written for her son by his daughter, the late Mrs Laetitia J. Chalk, in the last year of her life (1952). This runs 'CARLVX REX, found at Culm Davey and purchased from the finder by your grandfather'. Before her marriage in 1904 she had shared in full her father's antiquarian enthusiasms, and the venerable Dorset archaeologist General A. H. L. Pitt-Rivers (1827–1900) is supposed to have remarked of her 'Miss Ward is the only young lady I know who has any worth-while conversation'! Culm Davey (Nat. Grid. ST 1215) nestles on the southern slopes of the Black Down Hills which constitute the Devon and Somerset mearing in the extreme north-east corner of the former county. The Culm of the place-name, incidentally, represents an etymological misconception engendered by the proximity of the R. Culm. The Domesday form is *Comba* (OE *cumb*—'combe'), a good description of the remote locality, while the Davey perpetuates the name of David de Wydworth (Widworthy), a thirteenth-century holder of the manor.³

Charles the Bald, a grandson of Charlemagne, has an English—indeed a West Saxon—connection in that his daughter Judith, named after her redoubtable paternal grandmother from Alemannia, by her marriages with Æthelwulf (839–58) and Æthelbald (857–60) was successively the child-bride stepmother and sister-in-law of Ælfred the Great (871–99), though she had returned to the Continent a decade or so before his accession. Technically, Charles, born in 823, came of age in 838—and provision for him as future king had been made as early as 829—but one may doubt whether in fact he was in a position to strike coins before 840, the date usually accepted for his regal coronation,⁴ and it was perhaps only after the 842 Oath of Strasburg and the 843 Partition of Verdun that his power outside Neustria became even intermittently effective. The great majority of his coins appear to conform to two types,⁵ and the problem for the numismatist is to try to determine where exactly the line should be drawn between them—some of the later pieces partake of the character of a *type immobilisé* persisting at least as late as into the tenth century, while Charles's imperial interlude (875–7) was so brief that nothing should be read into the continuing occurrence on them of the regal title. That Morrison and Grunthal 1063, the issue to which Mr Chalk's coin undoubtedly belongs, begins relatively early in the reign, emerges clearly enough from a consideration of two of the four insular provenances. In a minor Welsh find from Penard in the Gower peninsula⁶ a single specimen is accompanied by an Italian denarius of Lothaire I (817–55) and a West Saxon penny of Ecgbeorht (802–38) which seems to belong to the early 830s, but more critical still perhaps is the occurrence of several examples, beside several of the parallel issue of Pippin II (838–65), in the Irish hoard from Mullaghboden in the Co. Kildare⁷ which seems to mirror events of the year 847 when a Westfaling fleet which since 843 had wintered at Noirmoutier off the Loire mouth suddenly abandoned its base there and apparently switched operations to Ireland. Nor is it altogether without significance that in the great Cuerdale hoard from Lancashire, concealed c.903, coins corresponding to Morrison and Grunthal 1064 heavily predominate, while the odd piece believed to have occurred in the Harkirke find from the same county, but concealed a few years

³ Cf. E. Ekwall, *The Concise Oxford Dictionary of English Place-Names* (4th edn., Oxford, 1960), p. 136.

⁴ Cf. most recently G. Barraclough, *The Crucible of Europe* (1976), p. 86.

⁵ K. F. Morrison and H. Grunthal, *Carolingian Coinage* (New York, 1967), nos. 1063–4.

⁶ Dolley and Morrison, *op. cit.*, p. 78, 2.

⁷ *Ibid.*, p. 78, 4.

later, may owe its very provisional classification as Morrison and Grunthal 1063 to 'improvement' by the engraver of the seventeenth-century copper-plate which is our only evidence for what the hoard contained.⁸

The legends of Mr Chalk's coin are inscribed with considerable neatness and run:

+ CARLVX REX *Francorum* ('Charles, King of the Franks')

and:

+ METVLLO ('at Melle')

while the execution of the types, a simple cross pattée and the Karolus monogram, exhibits the same sophisticated exactitude on the part of the engraver. The weight is 1.70 g (26.2 gr), and the die-axis a regular 180°, and the coin, which is superbly preserved, evidences very little wear, and appears to be of very fine silver. Although, then, the Culm Davey denarius corresponds very closely to a Cuerdale piece in the British Museum,⁹ there seems no good reason to preclude striking in the 840s or 850s when Charles was disputing effective control of Aquitaine with his nephew, the official king Pippin II. We are reinforced in this view by the authoritative and coincident opinions (in letters) of Mme F. Dumas-Dubourg of the Cabinet des Médailles of the Bibliothèque Nationale at Paris, and of Dr D. M. Metcalf of the Heberden Coin Room of the Ashmolean Museum at Oxford. Granted that in 845 Charles had formally to recognize Pippin's *de jure* claim to the regal title,¹⁰ the gesture was very much in return for territorial concessions while the situation in the march north of the River Charente was particularly confused, with both the cousins under threat from first the Westfaldings and later the Danes. For most if not all of this period Melle may even have struck simultaneously for both the kings—ninth-century concepts of sovereignty do not necessarily coincide with those of nineteenth-century theorists—and students of the contemporary English series should ponder the mounting body of evidence that in the later 860s and the 870s London struck without discrimination the major coinages alike of Wessex and of Mercia. If it be accepted, then, that Mr Chalk's coin is unlikely to have been struck much later than c.855, it must be admitted that the Culm Davey provenance accords reasonably well not only with the little that is known of the internal history of ninth-century Wessex, but also with the somewhat better-attested fact of a dynastic link forged at this juncture between the royal lines of Cerdic and of Pippin of Heristal.

Most probably after his return from Rome and France in the winter of 856/7, Æthelwulf appears to have implemented a major reform of the West Saxon coinage, one element in this being the demonetization of the mixture of specie of very diverse appearance which had been current before its supersession by the new pennies of one standard type. It cannot be pretended that absolute uniformity was achieved at the first attempt, but over the next thirty years or so the hoard-evidence indicates that there was progressive elimination of the obsolete and of the alien. On the face of it, then, a date not substantially later than one c.857 should be preferred for the casual loss at Culm Davey of a coin of which the English currency after that year was technically invalid. Given the remoteness of Culm Davey, too, it must seem doubly unlikely that there

⁸ Cuerdale, *ibid.*, pp. 80 and 81, 13; Harkirke, *ibid.*, p. 82, 14.

168.

⁹ *SCBI, The Carolingian Coins in the British Museum*, (2nd edn., 1960), p. 447.

¹⁰ M. Deanesly, *A History of Early Medieval Europe*

should be any connection with the events of the year 876 when a Danish horsed host from Wareham traversed Dorset only to be bottled up in Exeter before being shadowed northwards across Somerset to Gloucester,¹¹ or of the year 878 when the southern wing of the Great Army based on Chippenham overran and ravaged Somerset before Ælfred emerged from Athelney and fought it to a standstill at Eddington.¹²

It had been on 1 October 856 that Æthelwulf *en deuxième nocces* had married Charles the Bald's daughter at Verberie-sur-Oise some twenty-five miles to the north-east of Paris,¹³ and it will be the suggestion of this note that the most likely occasion for the introduction into Wessex of Mr Chalk's Melle denarius of the French king is his English son-in-law's return home with his child-bride and her Frankish entourage. Culm Davey, we may note, even if once more in private possession on the day in January 1066 when King Edward was alive and dead, marched with Hemyock (*Hamihoc*), its royal hundred-manor,¹⁴ and ecclesiastically today the two churches constitute a single cure. In this connection it may be noted that Mr Chalk's father, the Revd. E. S. Chalk, MA, BD (1874–1936), Rector (1904–36) of Kentisbeare and Blackborough, in the first of his Devonshire Association histories of those parishes¹⁵ (nos. 3 and 4, n.p., 1934) remarks Ælfred's disposition of estates in east Devon well to the south and west of Hemyock, and a reminder that West Saxon royal demesne land was by no means confined to Somerset. We are further grateful to Professor H. R. Loyn who suggested at this point that we should consult Dr Simon Keynes of Trinity College, Cambridge, who has made a special study of that college library's thirteenth-century transcript (MS R.5.33) of the summary headings from a lost cartulary of c.1100 with the texts of more than 130 Anglo-Saxon charters relating to early endowments of Glastonbury Abbey. Dr Keynes confirms (in a letter) that one such charter, now lost,¹⁶ appears to have recorded the grant of *Cumbe iuxta Culum*—i.e. Culm (Davey) beside Culmstock—by King Cynewulf (756–86) to a layman in the later 750s, while another lost charter¹⁷ of King Eadred (946–55) suggests that by the early 950s at the latest Culm Davey was again in the gift of the West Saxon king, so that the intervening non-regal grants c.760,¹⁸ by which part at least of the estate had passed to the Church, had not proved permanent.

This is not to claim that Culm Davey can be shown to have reverted to the Crown by the 850s, and it would be going light-years beyond the evidence to assert that the manor formed part of Judith's morning-gift on the occasion of either of her English marriages, but it remains intriguing that there should have been in the later Anglo-Saxon period continuing royal interest in a property within the bounds of which Mr Chalk's denarius may be supposed to have been found. Admittedly Æthelwulf, and after him Æthelbearht (858–865/6) while Æthelbald lived, appear to have accepted physical exclusion of their persons from Wessex proper in the interests of 'national unity', but it may be thought that they could well afford to do so when all production of coin was concentrated in south-east England which they controlled. Since the Viking

¹¹ F. M. Stenton, *Anglo-Saxon England* (3rd edn., Oxford, 1971), pp. 253–4.

¹² *Ibid.*, pp. 255–7.

¹³ *Ibid.*, p. 245.

¹⁴ *VCH Devon*, i. 508.

¹⁵ E. S. Chalk, *Kentisbeare*, 1934, and *Blackborough*, 1934; *Parochial Histories of Devonshire*, nos. 3 and 4.

¹⁶ P. H. Sawyer, *Anglo-Saxon Charters: An Annotated List and Bibliography* (1968), p. 458, no. 1683.

¹⁷ *Ibid.*, p. 466, no. 1745.

¹⁸ *Ibid.*, p. 459, no. 1691, taken in conjunction with William of Malmesbury's *De antiquitate Glastoniensis ecclesiae*, ed. T. Hearne (Oxford, 1727), p. 64.

sack of Southampton in 842, Wessex as such had been without a mint, and between 857 and 860 Æthelbald's lack of access to coining-facilities may well have blunted the impact on Devonshire of his father's monetary reforms, with a situation created thereby where a coin of such patent excellence as the Culm Davey denarius enjoyed a limited, if formally illicit, currency.

Much of what has gone before is frankly speculative, but we do well to remember that Anglo-Saxon Devonshire is characterized by a quite singular paucity of material remains. More than seventy years ago this dearth was remarked by R. A. Smith in his discussion of the tenth-century sword-guard found in 1833 at South Street, Exeter,¹⁹ and what is true of artifacts in the widest sense of the term holds good particularly for coins. Too long it has gone unremarked that Devonshire is one of the very few counties lying within the jurisdiction of the tenth- and eleventh-century English kings from which there is no record of an Anglo-Saxon coin-hoard, and even the single-finds of Anglo-Saxon pennies can be ticked off on the fingers of one hand. Here mention may be made appropriately of another ninth-century silver coin with a find-spot from east of the Exe, a Canterbury penny of Archbishop Ceolnoth (833–70) which came to light in 1932 in the course of archaeological excavation in the Deanery Gardens to the south-west of Exeter Cathedral. From a printed description,²⁰ corroborated by some notes among papers in the Dean and Chapter Library, it appears to have been of the type of 'Hawkins 147/148' (i.e. *BMC* 34—North 241) and so to belong relatively early in the long pontificate. The legends, which appear from a grotesquely reduced-scale illustration (*ibid.*, pl. xiv, no. 18) and transcriptions contemporary with the finding to have read + CIALNOÐ ARCEP and + BIORNMOD MONET, are entirely plausible, and reliance can be placed on the excavators' identification, though the actual coin seems to have been a victim of the air-raid of 4 May 1942 when a high-explosive bomb extensively damaged the south aisle of the cathedral choir where the coin, along with other archaeological finds from the Close (some salvaged), was on exhibition. It is in the context of the county's numismatic poverty where the Anglo-Saxon period is concerned that students, not only of Devonshire but also of the English coinage generally, are placed under such obligation to the memory of the Revd. J. H. Ward and of his daughter who noted so meticulously the provenance of an early medieval silver coin so far removed from the Victorian country parson's normal collecting interests.

¹⁹ Page, *op. cit.*, pp. 373–4.

²⁰ *Proceedings of the Devon Archaeological Society*, ii (1933–6), 71, n. 10, and p. 107.

THE 1894 BALLAQUAYLE HOARD: FIVE FURTHER PARCELS OF COINS ÆTHELSTAN-EADGAR

H. E. PAGAN

THE 1894 Ballaquayle (Douglas) find, the most important of three tenth-century hoards of Anglo-Saxon coins from the Isle of Man ending with coins of Eadgar, has been the subject of notes by H. A. Grueber,¹ P. W. P. Carlyon-Britton,² C. E. Blunt,³ and Professor M. Dolley,⁴ as well as by local Manx antiquaries. The circumstances of its discovery are clear, as are the broad outlines of the hoard's composition, but the number of coins involved has remained uncertain and a definitive publication even of the coins from it already traced is still awaited.

The purpose of the present note is to draw attention to five parcels of coins which appeared at sales conducted by Messrs. Sotheby between January 1898 and June 1899, and which there is reason to believe should be associated with the Ballaquayle find.

The first of these comprised lots 127-34 of a Sotheby sale of 10-12 January 1898.⁵ Lot 127 was a coin of Eric *Bloodaxe*, lot 128 consisted of a coin of Eadmund and two coins of Eadwig, lot 129 three coins of Eadred, and lots 130-4 contained between them twenty-two coins of Eadgar, not described in detail but evidently for the most part coins of *two-line* type (*BMC* type I and its variants). Lot 126, the lot immediately preceding, was a coin of Ælfred, and lot 135, the lot immediately following, contained six coins of Æthelred II and Eadward the Confessor; there were no other Anglo-Saxon coins in that part of the sale.

In the following month, in a sale of 17-19 February 1898,⁶ a similar group of coins appeared. Here lot 327 was a coin of Æthelstan, lots 328-30 contained between them five coins of Eadred, lot 331 was a coin of Eadwig, and lots 332-8 contained a total of twenty-six coins of Eadgar, of *BMC* types I, Ic, II, III, and V, with a mule of types III/IV. Apart from ten very miscellaneous ninth- and eleventh-century coins which comprised lots 339-41, there were no other Anglo-Saxon coins in that part of the sale.

Just a year later, in a sale of 6 February 1899,⁷ lot 186 contained one coin of

¹ 'The Douglas Find of Anglo-Saxon Coins and Ornaments', *NC* xiii (1913), 322-48. Grueber states that 'the description of the coins' in this paper was written in 1895 but that 'as I was unable to obtain particulars of the discovery of the hoard at the time' the manuscript was put on one side and only surfaced years later.

² 'On Some Coins of the Tenth Century, Found in the Isle of Man, with Special Reference to a Penny of Anlaf Struck at Derby', *BNJ* v (1908), 85-96.

³ 'A New Parcel from the Douglas, I.O.M., 1894 Hoard (?)', *BNJ* xxxv (1966), 7-11.

⁴ 'Some Preliminary Observations on Three Manx Coin-hoards Appearing to End with Pennies of Eadgar', *SNC* (1975), 146-7, 190-2. Coins from the hoard now in

the Manx Museum are listed on pp. 191-2.

⁵ This was a general sale including the collections of 'a member of the Numismatic Society of London', C. J. Caswell, J. B. Robinson, James Scotson, and other collectors.

⁶ This sale included the collection of William Mayler and those of 'a well-known amateur', 'a member of the Numismatic Society of London', and others.

⁷ The main property in this sale was 'the valuable collection of English and foreign coins and medals, &c. the property of a baronet'. It also included a collection of war medals formed by Robert Thompson, and other properties.

Æthelstan, lots 187 and 188 four coins of Eadred, and lots 189–95 twenty-four coins of Eadgar, of *BMC* types I (and variants), II, III, and IV. Lot 185 was a ninth-century coin of Æthelred I of Wessex, lot 196 contained four coins of Eadweard the Confessor, and lot 197 three coins of Burgred of Mercia, and that concluded the Anglo-Saxon element in that part of the sale.

A sale of 6–7 April 1899⁸ included, as part of ‘the property of a lady’, lots 285–91, containing between them no fewer than fifty-eight coins of Eadgar, of *BMC* types I (the majority), II, and III; while lot 292, containing thirteen coins in all, is described in the catalogue as consisting of ‘broken and cracked Saxon pennies, mostly of Eadgar; and two foreign sterlings’. Lot 293 comprised eight various ninth-, tenth-, and eleventh-century coins, and there were no further Anglo-Saxon coins in that property.

Finally, in a sale of 12–13 June 1899,⁹ lot 286 was a coin of Eadmund, lot 287 two coins of Eadred, lot 288 two coins of Eadwig, and lots 289–93 contained nine coins of Eadgar, of *BMC* types I, II, III, and IV. Lots 294 and 295 contained ten further ninth- and eleventh-century coins, of Burgred and of Eadweard the Confessor, and lot 297 at least one coin of Æthelred II, but that concluded the Anglo-Saxon element in that part of the sale.

It will be clear from this summary that if these parcels derived from a hoard it was one with a range of tenth-century issues among which coins of Eadgar predominated, and which included all Eadgar’s substantive *pre-reform* types, including the late type *BMC* II, absent from the 1950 Chester hoard, but not coins of his *reform* type, *BMC* VI. In every case the coins potentially associable with such a hoard are accompanied by other Anglo-Saxon coins but in no case, save for the appearance of tenth-century coins respectively of Eadweard the Elder, Eadred, and Eadwig in lot 293 of the sale of 6–7 April 1899, are the accompanying coins at all relevant to the potential hoard coins, or in themselves interesting; it could not be maintained that the way the coins in these parcels group in the reign-span Æthelstan–Eadgar was due to some accident of lotting or to their having belonged to a specialist collector of tenth-century coins. The most that might be urged is that the parcels deriving from the hoard in question may have been ‘salted’ by the addition of a few coins of the same period from other sources, and while this cannot be ruled out, a detailed consideration of the individual coins suggests that all the most significant of the coins involved had not previously appeared in the sale room and hence were indeed part of the hoard.

Before considering the identity of the hoard there is one preliminary point to be disposed of. Four of the five parcels appeared in sales among ‘other properties’ with no indication of any kind as to their ownership. The fifth, that in the sale of 6–7 April 1899, did, however, figure as part of ‘the property of a lady’, and its association with the four other parcels may seem speculative, especially as, unlike the other parcels, it was

⁸ This sale contained a small collection which had belonged to F. M. Jervoise, of Herriard Park, Basingstoke, and a rather more important collection of Anglo-Saxon coins, described as ‘mostly from the Ulleskelf find (Bateman)’ and as being ‘the property of a well-known amateur’. This ‘amateur’ is identified in several copies of the sale catalogue as being Lord Grantley and the coins are certainly from series which Lord Grantley actively collected. However, the coins match to a considerable extent purchases under the name ‘Napier’ at the Bateman

Heirlooms sale of 1893, and it may well be that this collection was made by Professor Arthur Sampson Napier (1853–1916), who was elected to the Numismatic Society of London on 16 Mar. 1893, just six weeks before the Bateman sale, and is known from a sale of 3–4 Aug. 1916 held after his death to have been a collector of Anglo-Saxon coins.

⁹ This sale included ‘a small but choice collection of Bactrian coins’, and coins from the collections of A. W. Smith and A. F. Hill.

entirely, or almost entirely,¹⁰ composed of coins of Eadgar and contained no scatter of coins of his immediate predecessors. It is, fortunately, a uniform characteristic of hoards deposited in Eadgar's reign up to the date of his reform of the coinage that they should contain coins of *two-line* type of previous reigns—coins of Eadmund, Eadred, Eadwig, and Eadgar of *two-line* type, as not being distinguishable from each other by type or weight and scarcely so by legend, circulated freely together—and the explanation for the absence of coins of Eadgar's predecessors from the parcel in the sale of 6–7 April 1899 must simply be that non-Eadgar coins had been culled off for separate sale, e.g. in the sale of June that year, and that the April parcel represented a less saleable core of the hoard which the vendor wished to be rid of.

That the hoard involved is that from Ballaquayle cannot be formally proven but seems patent. The anonymity of the vendor, or vendors; the dispersal of the coins through a number of minor sales; the blurring of the outline of each parcel by the addition of ordinary and actually quite irrelevant Anglo-Saxon coins of other periods; and even the way in which the earliest of the parcels is scantily catalogued (presumably so as not to draw undue attention to it) and the later parcels are catalogued with increasing detail (presumably as the vendor and cataloguer grew bolder); all point to the hoard from which the coins derive being a recent one falling within the ambit of the law of treasure trove, and to the vendor(s) being conscious that the coins should have been surrendered to the authorities. Not only is the 1894 Ballaquayle find a hoard found at just the right date and a hoard of just the right composition to be a likely source for the coins in the Sotheby sales, but it so happens that it is, as all those who have written on it have emphasized, a hoard over which official action at the time of discovery was slower and more inept than over any other hoard found at the end of the nineteenth century. Of a total of coins running into several hundreds a group numbering ninety-five only reached the British Museum for study, and it has been left to scholars of the present century to bring the total of identified Ballaquayle coins nearer to the true one and to indicate that still more remain to be traced.

In the course of the most recent note on the find,¹¹ Professor Dolley, as well as giving the first proper account of the coins from it preserved in the Manx Museum, has indicated criteria as to patination which should identify uncleaned coins from it, and although this is not as wholly decisive when considering the coins in the Sotheby sales as it might be, since those coins from the Sotheby parcels which the present writer has seen have all been cleaned, yet the original patination seems from surviving traces in every case to have been a deep bottle-green and that seems wholly compatible with the patination of the uncleaned coins in the Manx Museum as described more fully by Dolley.

It remains to give a summary listing of the coins in the Sotheby sales, together with such information on their subsequent fate, or possible subsequent fate, as is available. In compiling the list and in the task of associating the descriptions of the coins as given in the sale catalogues with coins known today, I have been greatly helped as ever by Mr C. E. Blunt's knowledge of the series and unrivalled card index of it.

¹⁰ Lot 292 in this sale comprised 'broken and cracked Saxon pennies, mostly of Eadgar', which allows the inference that some of these were not coins of Eadgar, and lot 293 in the sale included, with five other coins obviously

not from the same source, single coins of Eadward the Elder, Eadred, and Eadwig. Lots 285–91 contained, by contrast, fifty-eight coins of Eadgar and no coins of other rulers.

¹¹ *SNC* (1975), loc. cit.

Students may gauge the importance of this material for a reconstruction of the Ballaquayle hoard from the fact that the number of Ballaquayle coins from all sources identified up till now is in the region of 200; while the list below adds to these 200 coins at least another 120 of which the sale catalogues provide reasonable identifications and a further 50 or so described less fully.

LIST OF COINS

ÆTHELSTAN 925-939

BMC V (Circumscription/Cross type)

1. Chester mint, moneyer Eadmund. Legends +EDELSTAN REX TO BRT and EADMVND M-O LECE. 'Slightly chipped on edge'. Sotheby 6-7 Feb 1899 lot 186 bt Walters = Walters sale (1913) lot 21 bt Young = *SCBI* Chester 39.
2. Chester mint, moneyer not stated. Sotheby 17-19 Feb 1898 lot 327 bt Ricketts.

EADMUND 939-946

BMC VII var. (Helmeted Bust/Cross Crosslet, Crescents and Dots)

1. Moneyer Bese. Legends +EADMVND REX and +BESE MONETA. Sotheby 12-13 June 1899 lot 286 bt Spink = Spink's *Numismatic Circular* (hereafter cited as *SNC*) (1899) no. 57775 = Lockett sale (1958) lot 2743.

Type not stated but evidently *BMC I* (two-line type)

2. Moneyer Eadred. Legend EADRED. Sotheby 10-12 Jan 1898 lot 128 bt Lincoln.

EADRED 946-955

BMC I (Two-line type)

1. Moneyer Baldric. BALDRIC MOE. Sotheby 6-7 Feb 1899 lot 188 bt Lincoln.
 2. Moneyer Cristin. GRISTIN WEO. Sotheby 17-19 Feb 1898 lot 329 bt Lincoln = perhaps coin in W. C. Boyd collection published *NC* (1900), p. 266. Not to be identified with coin now in Blunt collection *ex* Walters (1932) lot 64, which has a non-Ballaquayle patination.
 3. Moneyer Grim. CRIMES MOT. 'Chipped'. Sotheby 6-7 Feb 1899 lot 188 bt Lincoln. Presumably variety with rosette of pellets at top and bottom of reverse.
 4. Moneyer Manna. HANNE MO. Sotheby 17-19 Feb 1898 lot 330 bt Verity.
 5. Moneyer Oslac (?). OSLAF [*sic*] MO. Four dots in obverse field. Sotheby 12-13 June 1899 lot 287 bt Hands = BM *ex* Lockett sale (1955) lot 596 *ex* P. W. Carlyon-Britton sale (1913) lot 419. The BM coin clearly reads OSLAC but it has a Ballaquayle patination and the equation of it with the Sotheby 1899 coin seems certain.
 6. Moneyer Osulf. OSVLFE MO. M in obverse field. Sotheby 12-13 June 1899 bt Hands = perhaps P. W. Carlyon-Britton sale (1916) lot 1005, but this reads MOT.
 7. Moneyer Reinfrith. REINFIRD. Sotheby 17-19 Feb 1898 lot 330 bt Verity = perhaps P. W. Carlyon-Britton sale (1913) lot 414.
 8. Moneyer Thurmod. ÞVRMOD. Sotheby 6-7 Feb 1899 lot 188 bt Lincoln. Presumably variety with rosettes of pellets at top and bottom of reverse.
 9. Moneyer Thurmod. DRMODE MO. Sotheby 17-19 Feb 1898 lot 329 bt Lincoln. Variety with rosettes of pellets at top and bottom of reverse.
- 10-12. Three coins, moneyers not stated. Sotheby 10-12 Jan 1898 bt Cull.

BMC V (Crowned Bust type)

13. Moneyer Farman. FARMAN MONE. Sotheby 6-7 Feb 1899 lot 187 bt Spink = *SNC* (1899) no. 57784, where it is stated that this coin was from the same obverse die as *ibid.*, no. 57783, a coin of the same type by the moneyer Manna. The Farman coin = presumably *SCBI* Cambridge 595 *ex* Young *ex* P. W. Carlyon-Britton sale (1913) lot 408. It should be noted that Professor Grierson's statement that

the Cambridge coin is 'plugged' is wrong, for all coins of this type by the moneyers Farman and Manna have a flat area at the point where the apparent plugging on the Cambridge coin occurs.

14. Moneyer Saraward. SARVVD. Sotheby 17-19 Feb 1898 lot 328 bt Lincoln.

EADWIG 955-959

BMC I (Two-line type)

1. Moneyer Folcnard. Legends +EADVIG REX .: and FOLCNARD. Sotheby 17-19 Feb 1898 lot 331 bt Verity = presumably P. W. Carlyon-Britton sale (1913) lot 432 = perhaps Forrer sale (1961) lot 918.
2. Moneyer Swerling. Legends +EADVVI REX and SPERLING. Sotheby 12-13 June 1899 lot 288 bt O'Hagan = O'Hagan sale (1907) lot 348 = Blunt, bt from Spink 1955.
3. Moneyer uncertain (but cf. *BMC* Eadwig 25). Legends +EADVVIC REX .: and F+HEELO. Sotheby 12-13 June 1899 lot 288 bt O'Hagan = O'Hagan sale (1907) lot 348 = coin in Spink stock in 1967.
- 4-5. Two coins, moneyers not stated. Sotheby 10-12 Jan 1898 lot 128 bt Lincoln.

EADGAR 959-975

BMC I (Two-line type)

- 1-2. Moneyer Adelaver. ADELAVER NO. Sotheby 6-7 April 1899 lot 285 bt Spink. Two coins. Cf. *SNC* (1899) nos. 58581, 58582, 58590.
- 3-4. Same moneyer. ADELAVER NO. Sotheby 6-7 April 1899 lot 286 bt Spink. Two coins. Cf. *SNC* nos. above.
5. Moneyer Adelger. ADELGER O. Sotheby 6-7 April 1899 lot 285 bt Spink.
6. Moneyer Aethelsie. AEDEL ZIE NO. Sotheby 6-7 April 1899 lot 285 bt Spink.
7. Same moneyer. AEDEL ZIE NO. Sotheby 6-7 April 1899 lot 286 bt Spink.
8. Moneyer Albutic. ALBUTC NO. Sotheby 6-7 April 1899 lot 285 bt Spink.
9. Same moneyer. AEBVT MO retrograde. Sotheby 6-7 April 1899 lot 285 bt Spink.
10. Moneyer Asferth. ASFERD MON. Sotheby 6-7 April 1899 lot 285 bt Spink.
11. Same moneyer. AZGERD NON. Sotheby 6-7 April 1899 lot 286 bt Spink = *SNC* (1899) no. 58588.
12. Moneyer Asmaned. AZMANED. Sotheby 6-7 April 1899 lot 285 bt Spink.
13. Moneyer Athlwin. ADLVIN MO. Sotheby 6-7 Feb 1899 lot 194 bt Fenton.
14. Moneyer Benediht. BENEDIHT. Sotheby 6-7 Feb 1899 lot 193 bt Walters.
15. Moneyer Britfer(th). BRITFER O. Sotheby 6-7 April 1899 lot 286 bt Spink = *SNC* (1899) no. 58598.
16. Moneyer Copman. CORMAN M. Sotheby 6-7 April 1899 lot 286 bt Spink = *SNC* (1899) no. 58597.
17. Moneyer Durand. DVRAND MO. Sotheby 6-7 April 1899 lot 286 bt Spink.
18. Moneyer Eanulf. EANVLF MO. Sotheby 6-7 Feb 1899 lot 190 bt Walters.
19. Same moneyer. GANVLF MO. Sotheby 6-7 April 1899 lot 287 bt Spink.
20. Same moneyer. EANALF MO. Sotheby 6-7 April 1899 lot 287 bt Spink.
21. Moneyer Efrolf. EFROLF MO. Sotheby 6-7 April 1899 lot 287 bt Spink.
22. Moneyer Ethelaine. EDELAINE MO. Sotheby 17-19 Feb 1898 lot 336 bt Bearman.
23. Moneyer Ethelm. EDELM MV. Sotheby 6-7 Feb 1899 lot 190 bt Walters.
24. Moneyer Farthe(i)n. CARDEIII NO. Sotheby 6-7 April 1899 lot 286 bt Spink = *SNC* (1899) no. 58593.
25. Same moneyer. FARDEN MIO. Sotheby 6-7 April 1899 lot 287 bt Spink.
26. Moneyer Fredric. FREDRIC M. Sotheby 6-7 April 1899 lot 287 bt Spink.
- 27-8. Moneyer Grid. GRID MONE. Sotheby 6-7 April 1899 lot 287 bt Spink. Two coins.
29. Moneyer Harcer. MARCER MO. Sotheby 6-7 Feb 1899 lot 194 bt Fenton.
30. Same moneyer. MARCER MO. Sotheby 12-13 June 1899 lot 293 bt Spink = *SNC* (1899) no. 58599, which notes triangle of pellets in obverse field.
31. Moneyer Hereman. HEREMAN O. Sotheby 6-7 April 1899 lot 287 bt Spink.
32. Moneyer Heriger. HERIGER. Sotheby 6-7 Feb 1899 lot 191 bt Meder.
33. Same moneyer. HERIGER. Sotheby 6-7 Feb 1899 lot 195 bt Fenton.
34. Same moneyer. HERIGER. Sotheby 17-19 Feb 1898 lot 334 bt Verity.
35. Moneyer Ingolf. INGOLF MV. Sotheby 6-7 April 1899 lot 288 bt Spink = *SNC* (1899) no. 58586.
36. Moneyer Isenbert. ISENBERT. Sotheby 6-7 April 1899 lot 288 bt Spink.

37. Moneyer Iwe. IWE. Sotheby 6-7 Feb 1899 lot 195 bt Fenton.
38. Same moneyer. IWE MONET. Sotheby 6-7 April 1899 lot 288 bt Spink. Cf. *SNC* (1899) nos. 58583, 58589.
39. Same moneyer. IWE NONET. Sotheby 6-7 April 1899 lot 288 bt Spink. Cf. as above.
40. Same moneyer. IWE NONEN. Sotheby 6-7 April 1899 lot 288 bt Spink. Cf. as above.
41. Same moneyer. IWE MONET. Sotheby 6-7 April 1899 lot 289 bt Spink. Cf. as above.
42. Same moneyer. IWE NONEN. Sotheby 6-7 April 1899 lot 289 bt Spink. Cf. as above.
43. Moneyer Lenna. LENNA NO. Sotheby 6-7 April 1899 lot 288 bt Spink = *SNC* (1899) no. 58596.
44. Moneyer Manan (or Manna). MANAN. Sotheby 17-19 Feb 1898 lot 334 bt Verity.
45. Same moneyer. FANNA. Sotheby 6-7 Feb 1899 lot 195 bt Fenton.
46. Same moneyer. MANAM NO. Sotheby 6-7 April 1899 lot 288 bt Spink. Cf. *SNC* (1899) nos. 58584, 58585, 58600, 58601.
- 47-8. Same moneyer. WANAI MO. Sotheby 6-7 April 1899 lot 289 bt Spink. Two coins. Cf. as above.
49. Same moneyer. MANAN MO. Sotheby 6-7 April 1899 lot 289 bt Spink. Cf. as above.
50. Same moneyer. NANAN NO. Sotheby 6-7 April 1899 lot 289 bt Spink. Cf. as above.
- 51-2. Moneyer Morgna. MORGEMAI. Sotheby 6-7 April 1899 lot 289 bt Spink. Two coins. One of these = *SNC* (1899) no. 58594.
53. Same moneyer. MORENA. Sotheby 6-7 Feb 1899 lot 194 bt Fenton.
54. Moneyer Ogeman. OEEMAN VI. Sotheby 6-7 Feb 1899 lot 194 bt Fenton.
55. Same moneyer. OGENANBI. Sotheby 6-7 April 1899 lot 289 bt Spink = *SNC* (1899) no. 58591.
56. Moneyer Rigolf. RIGOLF MN. Sotheby 6-7 April 1899 lot 290 bt Cooper.
57. Moneyer Unbein. VNBEIN MO. Sotheby 17-19 Feb 1898 lot 336 bt Bearman.
58. Same moneyer. VNBEIN. Sotheby 6-7 Feb 1899 lot 195 bt Fenton.
59. Same moneyer. HVNBEIN O. Sotheby 6-7 April 1899 lot 288 bt Spink.
- 60-3. Same moneyer. VNBEIN MO. Sotheby 6-7 April 1899 lot 290 bt Cooper. Four coins, 'all varied dies'.
- 64-5. Moneyer not stated. Sotheby 10-12 Jan 1898 lot 130 bt Stafford. Two coins.

BMC Ic (Two-line type, rosettes of pellets above and below, three crosses between the lines of the inscription)

66. Moneyer Berenard. BERENARD MO. Sotheby 17-19 Feb 1898 lot 336 bt Bearman. Letter M in obverse field. Probably *SCBI* Norweb 164 *ex* Duke of Argyll.

BMC Id (Two-line type, rosettes of pellets above and below, annulet, cross, and annulet between the lines of the inscription)

67. Moneyer Aelfred. AELFRED. Sotheby 6-7 Feb 1899 lot 192 bt Fenton.
68. Moneyer Almund. ALMNVND. Sotheby 12-13 June 1899 lot 293 bt Spink = *SNC* (1899) no. 58604.
69. Moneyer Eadmund. EADMVND. Sotheby 6-7 Feb 1899 lot 192 bt Fenton.
70. Moneyer Edroth. EDROÐ. Sotheby 6-7 Feb 1899 lot 192 bt Fenton.
71. Moneyer Werstan. VVERSTAN. Sotheby 6-7 Feb 1899 lot 191 bt Meder.
72. Same moneyer. PERSTAN. Sotheby 6-7 Feb 1899 lot 191 bt Meder.

BMC II (Three-line type)

73. Chester mint, moneyer Gillys. GILLVS M LE. Sotheby 17-19 Feb 1898 lot 335 bt Verity.
74. Same mint and moneyer. GILLVS MO LE. Sotheby 6-7 Feb 1899 lot 190 bt Walters = Walters sale (1913) 26 bt Lincoln. This may possibly be *SCBI* Chester 91 *ex* Gardner *ex* *SNC* (1919) no. 70778 *ex* P. W. Carlyon-Britton sale (1918) lot 1720.
75. Chester mint, moneyer Melsuthan. MELSVÐAN LE. Sotheby 12-13 June 1899 lot 293 bt Spink = *SNC* (1899) no. 58609. Perhaps the coin later in Mann sale (1917) lot 164 *ex* Bliss sale (1916) lot 103, where it is specifically assigned a 'Douglas' hoard provenance. Now perhaps *SCBI* Chester 93 or 94.
76. Chester mint, moneyer Thurmod. DVRMOD LE. Sotheby 17-19 Feb 1898 lot 334 bt Verity.
77. Chester mint, moneyer Wulgar. PVLGAR M (and by implication LE). Sotheby 17-19 Feb 1898 lot 335 bt Verity = presumably *SCBI* Chester 104 *ex* Gardner *ex* P. W. Carlyon-Britton sale (1916) lot 1035.
78. Tamworth mint, moneyer Monna. MONNAM TE. Sotheby 6-7 April 1899 lot 291 bt Spink = *SNC* (1899) no. 58617, described as 'slightly cracked'.

BMC III (Circumscription/Cross type)

79. Derby mint, moneyer Berenard. Legends +EADGAR REX SAXORV+ and +BERENARD IN DEREBI. Sotheby 12-13 June 1899 lot 289 bt Spink = *SNC* (1899) col. 3531 (woodcut ill) = Grantley sale (1944) lot 1102 = Dresser collection, New York.¹²
80. Shrewsbury mint (?), moneyer Oswald. Legends +EADGAR EX TO BRIT+ and OSPALD MONTA SG+. Sotheby 12-13 June 1899 lot 290 bt O'Hagan = O'Hagan sale (1907) lot 353 = P. W. Carlyon-Britton sale (1918) lot 1720 = Wheeler sale (1930) lot 36 = *SCBI* Midlands 172, Shrewsbury Museum.¹³
81. Winchester mint, moneyer Æthestan. Legends +ADGAR REX and AEDESTAN MO PI. 'Small cross and dot in centre', i.e. a pellet in obverse field. Sotheby 12-13 June 1899 lot 291 bt O'Hagan = O'Hagan sale (1907) lot 353.
82. Same mint and moneyer. Legends +EADGAR REX AN and AEDESTAN MO PI. Sotheby 12-13 June 1899 lot 292 bt Spink = *SNC* (1899) no. 58615, where a pellet in obverse field is noted.
83. Winchester mint, moneyer Deal. Legends +EADGAR ANGLORVM [*sic*] and +DEAL MONETA WINO. Sotheby 6-7 Feb 1899 lot 189 bt Cull. Very probably the coin later in P. W. Carlyon-Britton sale (1918) lot 1722 bt Spink. Not subsequently traced.
84. No mint, moneyer Durand. DVRAND. Sotheby 17-19 Feb 1898 lot 333 bt Verity.
85. Same moneyer. DVRANDES MOT. Sotheby 6-7 Feb 1899 lot 193 bt Walters.
86. Same moneyer. DVRANDES MOT. Sotheby 6-7 April 1899 lot 291 bt Spink.
87. No mint, moneyer Fastolf. FASTOLF. Sotheby 17-19 Feb 1898 lot 333 bt Verity.
88. Same moneyer. FASTOLF. Sotheby 6-7 Feb 1899 lot 193 bt Walters.
89. Same moneyer. FASTOLF. Sotheby 6-7 Feb 1899 lot 195 bt Fenton.
- 90-2. Same moneyer. FASTOLF MONS (*sic*, query *recte*). Three coins. Sotheby 6-7 April 1899 lot 290 bt Cooper.
93. No mint, moneyer Fastolf Doda. FASTOLF AODA. Sotheby 6-7 April 1899 lot 291 bt Spink = *SNC* (1899) no. 58571 = presumably P. W. Carlyon-Britton sale (1913) lot 457.
94. No mint, moneyer Fastolf Rafn. FASTOLF RAFN. Sotheby 6-7 April 1899 lot 290 bt Cooper = presumably P. W. Carlyon-Britton sale (1918) lot 1726. Perhaps the coin now in Liverpool Museum *ex* Nelson.
95. No mint, moneyer Herolf. HEROLF. Sotheby 6-7 Feb 1899 lot 193 bt Walters.
96. Same moneyer. HEROLF MONE. Sotheby 6-7 April 1899 lot 291 bt Spink. Cf. *SNC* (1899) nos. 58572-6, 58578-80.
97. Same moneyer. HEROLF MONET. Sotheby 6-7 April 1899 lot 291 bt Spink. Cf. as above.
- 98-100. Moneyer either Durand or Herolf (probably the latter). Three coins. Sotheby 6-7 April 1899 lot 291 bt Spink. Cf. as above.
101. Moneyer not stated. One coin. Sotheby 10 Jan 1898 lot 130 bt Stafford.

BMC IV (Circumscription/Rosettes type)

102. Moneyer Eoroth. EOROD MONET. Sotheby 6-7 Feb 1899 lot 189 bt Cull.
103. Moneyer Winsige. +WINSIGE. Sotheby 12-13 June 1899 lot 291 bt O'Hagan = O'Hagan sale (1907) lot 353 = perhaps P. W. Carlyon-Britton sale (1916) lot 1048.

BMC V (Bust type)

104. Moneyer Liofstan. LIOFSTAN MONETA. Sotheby 17-19 Feb 1898 lot 332 bt Lincoln = probably Grantley sale (1944) lot 1093 *ex* Lawrence.

Mule of BMC III/IV

105. Moneyer Freotheric. Legends EADGAR REATOD and +FREDERIC MON. Sotheby 17-19 Feb 1898 lot 333 bt Verity. Perhaps the coin now in Chester Museum *ex* Gardner.

¹² Mr J. D. Brady of the American Numismatic Society has kindly confirmed that the patination of this coin is compatible with the patination of the Ballaquayle coins as described by Professor Dolley.

¹³ This also has a Ballaquayle patination (information kindly supplied by Mr E. J. Priestley, Curator of Shrewsbury Museum).

Type not stated but presumably mostly coins of *BMC* I

106–24. Sotheby 10–12 Jan 1898 lots 131–4. In all 19 coins. Lot 131 bt Ralph, 132 bt Cull, 133 bt Dudman, 134 bt Britton.

125–35. Sotheby 17–19 Feb 1898 lots 337, 338. In all 11 coins. Lot 337 bt Verity, 338 bt Ricketts.

No identification given but said to be mostly of Eadgar.

1–11. Sotheby 6–7 April 1899 lot 292 bt Oman. 'Broken and cracked Saxon pennies, mostly of Eadgar'. 11 coins.¹⁴

ERIC BLOODAXE (first reign in York) 948–949

Sword/Two-line type

1. Moneyer Ingelgar. Legends ERIC REX and INGELGAR M: +. Sotheby 10–12 Jan 1898 lot 127 bt Spink = Murdoch sale (1903) lot 53 = *SCBI* Copenhagen 651.

¹⁴ This lot may be the source of three coins of Eadgar of Two-line type, moneyers respectively Albutic, Cawelin, and Ive, presented by the future Sir Charles Oman to the Bodleian Library in 1899 (*SCBI* Oxford 386, 387, and 397). They have not, however, been included in the list of Eadgar coins given above. It may be convenient to note here that the following coins possibly deriving from the Ballaquayle hoard have also been excluded from the foregoing list: (i) thirteen coins forming lot 50 of a

Sotheby sale of 18–20 July 1896, of Æthelstan, Eadgar, Eadmund, and Eadred, described as 'all corroded' and perhaps representing an uncleaned parcel from Ballaquayle; (ii) a group of coins in the Bliss sale, 1916, with stated 'Isle of Man' (i.e. Ballaquayle) provenances; here the uncertainty is whether these coins derive from one or other of the Sotheby sales taken account of in this note, or whether they represent a further parcel, or whether the truth is somewhere between the two.

CONTINUITY AND CHANGE IN ENGLISH MONETARY HISTORY c.973–1086

PART I

D. M. METCALF

BETWEEN Eadgar's reform of the coinage and the date of the Domesday Book, there are a good hundred years from which the available numismatic evidence is incomparably rich and detailed. Our understanding of the work of the mints, in matters such as the relative chronology of the issues, the arrangements for the supply of dies, and the use of multiple weight-standards, makes the late Anglo-Saxon series one of the show-pieces of medieval numismatics. But this is still not the whole story. We may know in great detail how the coinage was issued, but how was it used? It has proved difficult to find unambiguous evidence bearing on that second question, and there is still an unresolved conflict between two schools of thought. Professor Sawyer, for example, in a lecture to the Royal Historical Society in 1964 spoke about the wealth of England in the eleventh century, and emphasized the quantities of silver coins that were minted, the existence of a money economy even at the peasant level of society, and the importance of the export trade in wool. England was rich, he suggested, because of its wool.¹ Most other students have been inclined to minimize the everyday use of coinage and to stress the probable connection between mint activity (including the choice of weight-standards) and the need for cash to pay danegelds. Thus Dr Stafford, lecturing to us in 1978 on the historical implications of die production under Æthelred II, argued that because relatively few Helmet coins have been found in Scandinavia even though a very large geld was paid during the currency of the type, the much greater number of Crux, Long Cross, and Last Small Cross coins found there may reflect the payment of other unknown gelds of which we have no documentary record.²

It may be possible to offer economic and political interpretations of this monetary situation which although very different are not in conflict. They may merely focus attention respectively on separate and contrasting aspects of the coinage. It would seem to be fair comment that a great deal of money was carried out of England for political reasons, but that very little came in for other than economic reasons. Between the 980s and 1014, at least £150,000, or 36 million pence, were handed over in danegeld, yet at the end of that period the currency was still roughly as large as it was at the

Acknowledgements. I should like to express appreciation of the kind help and interest shown by a number of colleagues and friends, in particular Antony Gunstone, Christopher Blunt, Marion Archibald, Mark Blackburn, David Hinton, Paul Robinson, and the late Stuart Rigold, in making the list as complete and accurate as possible. I should also like to thank Pauline Stafford, Stewart Lyon, Mark Blackburn, and Ian Stewart who

kindly read earlier drafts of this paper and offered wise advice.

¹ P. H. Sawyer, 'The Wealth of England in the Eleventh Century', *Trans. R. Hist. Soc.* ⁵ xv (1965), 145–64.

² P. Stafford, 'Historical Implications of the Regional Production of Dies under Æthelred II', *BNJ* xlviii (1978), 35–51.

beginning. The mining of new metal may have helped to replenish the stocks, but its contribution was almost certainly trifling when measured against quantities like these. If it were otherwise, we might expect to see signs of it in the regional patterns of minting. If there were any mints that were steadily coining new silver in the same way that Carlisle and Newcastle did in the twelfth century, it is plain that they were among the smaller mints. In the period after c.973, only Lydford has been mentioned as a possibility;³ and its output was a fraction of one per cent of the national total. From nowhere in England is there any documentary or metallurgical evidence for the minting of new silver, other than anecdotal information about the production of lead. I think we can assume, therefore, that in the long run virtually all the silver that went out of England as danegeld was matched by similar quantities that had come in from overseas.

This net inflow was presumably almost all in the form of foreign⁴ or obsolete⁵ coin, and it was a major part of the work of the mints to convert it into current English coin. But it is in assessing the reasons for minting that there is the sharpest clash of opinion. Its focus seems to be a disagreement whether the payment of danegeld absorbed so much of the available cash as to give some mints occasion to strike coins specifically for that purpose. Against the idea, one may point out that this would probably have resulted in sums of money being carried to Scandinavia which contained long runs of die-duplicates, fresh from the mint. (A pair of dies might have produced, say, £40 worth of coin.) One would then expect such heavy die-duplication to be reflected in at least some of the Scandinavian hoards; which seems very rarely to be the case. The thoroughly mixed character of most of them may well be the result of coinage having circulated freely in Scandinavia before it was withdrawn and concealed, and one might therefore do better to base the argument on the absence of long runs of die-duplicates in the Scandinavian material as a whole—for which the Lincoln corpus provides well-documented evidence, Long Cross being to some extent the exception that proves the rule.

At first sight one might suppose that it would be easier to defend the proposition that special mint activity was unnecessary, simply because the English currency was by a considerable factor larger than the sums paid out in danegeld: if there was plenty of coin already in circulation, collecting it and then reminting it merely in order to pay it over to the Danes would have added insult to injury. Unfortunately the problem is not as easily resolved as that. True, the output of the mints was, as Professor Sawyer recognized, very large. But one of the points advanced in this paper will be that the quantities of coins minted under Æthelred and Cnut may give a greatly exaggerated impression of the size of the currency. Some reconciliation of the conflicting viewpoints may thus be possible. In so far as the work of the mints was to convert the foreign coin which flowed quietly into the country as a result of trade, their context is economic rather than political, but an anomaly such as the unusual activity of London moneyers

³ R. H. M. Dolley, 'The Last Coins of the Mint of Lydford', *NCirc.* lxvi (1958), 161f. Other candidates would perhaps include Derby. It is not obvious at which mint any silver that may have been mined in the Mendips would have been coined. Welsh tribute is mentioned in the time of Athelstan; and Shrewsbury remains a fairly active mint.

⁴ One suspects that the mint of Köln was a major contributor.

⁵ English coin which had circulated in Scandinavia seems not to have re-entered the English currency; if it had done so it would be identifiable among the English finds by its peck-marks.

at the southern Danelaw mints in Crux⁶ can perhaps be explained in terms of arrangements to pay the first major danegeld in that region in 991, if we recognize that the currency at any particular moment in time was much smaller than the total issues of coinage.

In order to assess the part money played in the political and economic life of eleventh-century England, given that the documentary sources are largely silent, we should begin by asking questions of such a kind that they could receive a statistical answer from the coins themselves. The sort of factual inquiries that come to mind are these: how rapidly did the Anglo-Saxon currency move about?—what was the regional pattern of circulation?—what was the volume of mint output, type by type, and what was the volume of the currency?—and in all these aspects of the coinage, what trends if any can we detect between c.973 and 1086?

There are quite straightforward ways of answering all these questions. Assembling the evidence is rather a lengthy exercise, and there are areas where it is insufficient. The chief difficulty is that the evidence is or may be biased. In seeking to establish the outlines of eleventh-century monetary history, we need to scrutinize the general arguments very cautiously, and to consider at each stage whether a numerical bias could have distorted the perspectives we draw. On some topics the element of uncertainty remains relatively large, and it will be prudent to combine or compare various lines of argument, in the hope of arriving at similar answers. Obviously, we should be at pains to look at all the evidence, and to avoid generalizing from only a part of it. The small mints, such as Cadbury or Watchet, have yielded so much of interest that there has perhaps been a tendency to form an idea of the currency as a whole in which they are given too much weight. One way in which we may hope to obtain a balanced sample is to gather up the single finds. It may be presumed that they are mostly accidental losses. By studying them we avoid many of the uncertainties attaching to hoards, which may for all we know have been put together selectively with reference to the source or quality of the coins. Single finds, on the other hand, should provide highly reliable evidence about the speed with which coins moved about, and the regional pattern of circulation.

Then we shall look at the regional distribution of minting and the ranking of the mints in terms of their output. In a second part, we shall assess the validity of statistical estimates of mint output, and consider how the volume of the currency in England may have differed from it. The arguments will be summarized in the form of a numerical model of the late-Saxon currency.

SINGLE FINDS

The mint name on the reverse of each coin was of no significance or interest to the user, even if he was one of the minority who could read. The weight and, later, possibly the alloy may have tended to be better at some mints than at others, but we have no reason to imagine that this affected the spending power of the coins, at least while they remained in England. Authentic stray losses—and many of those listed below are from controlled archaeological excavations—may therefore be assumed with the greatest confidence to be random in respect of the mint of origin, among those passing from

⁶ C. S. S. Lyon, 'Some Problems in Interpreting Anglo-Saxon Coinage', *Anglo-Saxon England*, v (1976), p. 197 and n. 4.

hand to hand in the locality. In an earlier study,⁷ fifty single finds from the reign of Æthelred II were grouped in terms of whether or not they were from the local (i.e. the nearest) mint; 64 per cent (revised figure,⁸ 68 per cent) of them were not, and the proportion rises to 76 per cent (74 per cent) in the south and west (regions I, II, V, VIII, and X as defined below). Coins might presumably be lost at any time, early or late, in the validity period, so that even if minting was to some extent concentrated early in the type the (weighted) average length of time between issue and loss of Æthelred's coins was at most between three and four years, except possibly for First Hand and Long Cross coins, where it may have been as much as five or six. The single finds taken as a whole should therefore approximate to the pattern of dispersion from the mints of origin as it would have developed after that many years. That two-thirds to three-quarters of the stray losses should have been of non-local coins implies an astonishingly rapid and wide-ranging monetary circulation. Twenty years ago Michael Dolley and I canvassed the idea of a fifteen-mile radius to define the area which a mint was intended to serve.⁹ But if coins had circulated *only* in 'the area within which . . . a man could walk to the market and back again in a day',¹⁰ that is to say within the orbit of the local borough, the pattern of the single finds would have been extremely localized. This was not the case. Although monetary transactions at the local market were no doubt numerous, they did not create the pattern of diffusion of the currency as we observe it.

What could have created such a pattern? First, the cash income and expenditure of the king himself, and, secondly, trade at a distance could have done so; thirdly, the payment of gelds could not, or only very indirectly. Professor Barlow has attempted to assess the cash income of Edward the Confessor, while making clear how uncertain an exercise it is.¹¹ Much of the income from the demesne will have been in kind: in cash the king is unlikely to have been owed more than about £2,500 a year, much of which may have been disbursed again locally or used to support the regional administration without ever having been brought to the court. The heregeld, instituted according to the Chronicle in 1012 to pay mercenary troops, was assessed and collected nationwide, yielding perhaps £5000-6000, and was thus a powerful means of drawing cash out of every village. But it is not clear how far it would have put it back and thus caused a mixing of the coins that circulated in those villages, for much of it may have gone overseas. (Other gelds, similarly, would not have promoted a mixing of coins from many mints: they drew money out of every village, but they did not then mix it and feed it back.) The king had many other miscellaneous receipts, such as urban revenues, the profits of justice, oblates, and sundry perquisites of government. It is impossible to put an accurate figure on them, but if we were to say £2000 a year, the king's total cash income could have been at the most about £10,000, or 2.4 million pence a year. Before 1012 and after 1051 a distinctly lower estimate might be appropriate. The recycling via the central finances of perhaps one or at the most 2 million coins a year will have contributed significantly to the mixing of the currency in those regions where the king

⁷ D. M. Metcalf, 'The Ranking of the Boroughs: Numismatic Evidence from the Reign of Æthelred II', *Ethelred the Unready. Papers from the Millenary Conference*, ed. D. Hill (British Arch. Reports, British Series, 59) (Oxford, 1978), pp. 159-212.

⁸ Revised in light of addenda listed below.

⁹ R. H. M. Dolley and D. M. Metcalf, 'The Reform of the English Coinage under Eadgar', in *Anglo-Saxon Coins. Studies Presented to F. M. Stenton*, ed. Dolley (1961), pp. 136-68.

¹⁰ *Ibid.*, p. 148 f.

¹¹ F. Barlow, *Edward the Confessor* (1970), pp. 140-57.

spent cash. The rebuilding of Westminster Abbey, for example, is likely to have put a lot of money into circulation in Edward's reign. And the very high proportion of non-local coins in the south and west in Æthelred's reign might be partly explained by the king's itinerary.¹²

Barlow observes that the king had no elaborate storage system for money. The cash that reached him, he suggests, would have been kept in a box under the royal bed. To test the plausibility of this, I placed a dozen pennies of Edward in a pile, and found that it was half an inch high, with a diameter of about three-quarters of an inch. A pound sterling would make a rouleau about 10 inches long, and £1000 would occupy a space (in inches) at least 10 by 18 by 30, and would weigh half a ton. In relation to an annual cash income of between £6000 and £10,000, one can but say, 'Some box, some bed!' If Edward really received and spent that much money centrally, the logistics of carrying it from place to place and taking care of it must have been a headache. One wonders whether Winchester, where the scriptorium appears to have enjoyed a monopoly in charter production from 977 to 993, may not already during the third quarter of the tenth century—or even by the date of the coinage reform—have gained a special role as a permanent royal treasury.¹³ The unusually high share of the Winchester mint in the Reform/First Small Cross type may be thought to point that way.

Trade and commerce is the other obvious possibility to account for the diffusion of the currency. Because there is so much leeway in any estimates we can make of the king's expenditure and because we do not know the size of the circulating medium, it is impossible to subtract the coinage involved in the royal finances from a total in order to arrive at an estimate of the coinage involved in trade. The exercise would be so imprecise that it would not even tell us reliably which of the two was larger. Thus, for example, even in types with a large output such as Last Small Cross, of which an estimated 30 million coins were minted,¹⁴ the 1–2 millions per annum displaced by the royal finances would not explain the archaeological evidence unless the currency were far smaller than the total mintage. But this was a validity-period during which very heavy danegeld was paid, and the currency was possibly only about 10 millions. The argument is therefore inconclusive.

If there are any firm arguments they are to be found in other directions. The best reasons for thinking that trade was normally the major factor are that the proportion of non-local coins is fairly uniform throughout much of England; and that this pattern remains steady and does not so far as one can see respond to political vicissitudes. Secondly, the very large flows of money into the country, which replenished the losses incurred through the payment of geld, imply widespread trade.

If we extend the previously published analysis of single finds of Æthelred II to cover the period up to 1086, the following points can be made. They are based on a total of over 270 single finds, which are listed below (Appendix I). Of these, half a dozen are spurious or doubtful provenances; the Rusher Davies coins (Appendix II) are

¹² For the itinerary, see P. A. Stafford, 'The Reign of Æthelred II, a Study in the Limitations on Royal Policy and Action', *Æthelred the Unready*, pp. 19–21.

¹³ The status of the Winchester scriptorium has been disputed by Chaplais. The period during which it enjoyed a monopoly in relation to the date of the coinage reform is suggestive, but no more than that. See C. R. Hart, *The*

Early Charters of Northern England and the North Midlands (Leicester, 1975), p. 38, and, on the possible location of a treasury in the royal palace, idem, 'The *Codex Wintoniensis* and the king's *haligdom*', *Agricultural History Review*, xviii (1970), 7–38.

¹⁴ Metcalf, loc. cit., pp. 177–9.

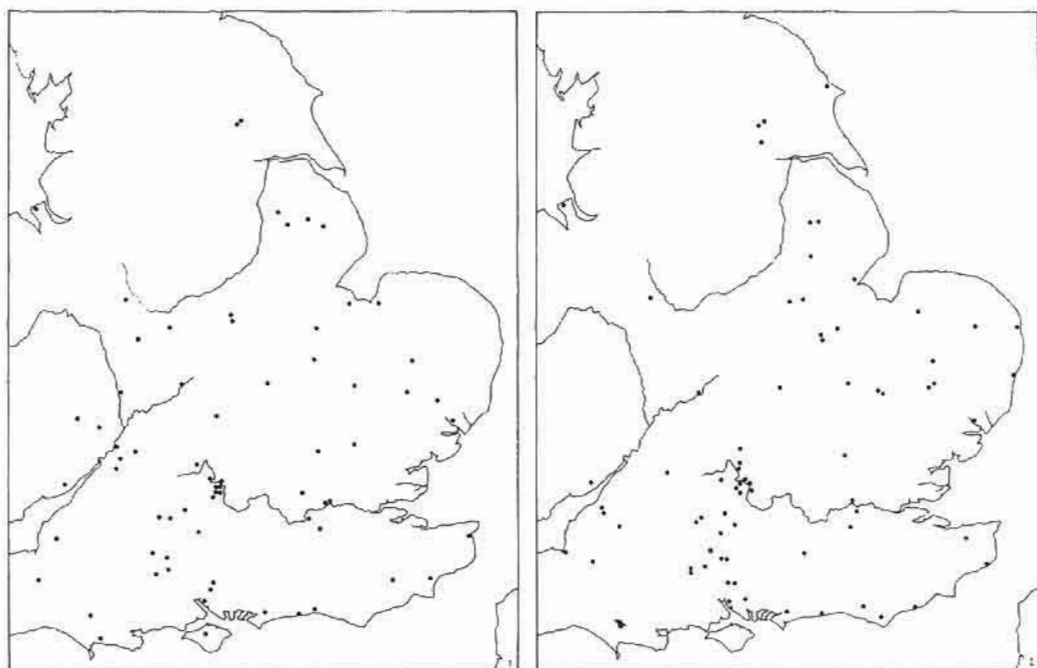


FIG. 1. Single finds, (a) coins minted c.973-1035, (b) coins minted 1035-c.1086. A dot may represent several finds from the same place, e.g. Meols, Lincoln, Winchester. (Source: Appendix I, below.)

debatable; and another half-dozen could be from hoards. There seems to be not the least reason to question the provenances of any of the others. A surprisingly large number are excavation coins, and an equally large number have been published only in the last few years, or still await publication.

1. The finds are from all over England as far north as Yorkshire and Cheshire and beyond that Jarrow, with no conspicuous concentrations, as may be seen from the maps (Fig. 1*a, b*). There are also a few finds from Wales, not shown on the maps. Many finds are from towns, but this is a bias introduced into the evidence by the choice of sites for excavation;¹⁵ there are plenty of stray finds from villages and from the countryside. It looks as though there is a tendency for finds to occur in villages very close to major boroughs, for example, near York or near Cambridge,¹⁶ but this too could be the result of modern bias, except perhaps in the case of the Rusher Davies finds from around Wallingford (Appendix II). Whether one can detect any connection between the rural finds and sheep farming, for example, in Hampshire and the Wiltshire downs or in the Cotswolds, is a delicate question which calls for fuller discussion at some other time. The total number of single finds is infinitesimally small in relation to the currency from which they were drawn, and apparent regional patterns could be distorted by many factors, for example, the type of soil in which the coins lay. As far

¹⁵ Lincoln and Winchester are prime examples; others are Canterbury, Chichester, Hereford, Leicester, Oxford, Richborough, Stafford, and Warwick.

¹⁶ Dringhouses and Catterton, near York; Great Shelford and Hadstock, near Cambridge.

as any trend is concerned, if we compare the finds from before and after 1035, from two periods each of about sixty years, we should discount these unknown factors to some extent. There is very little difference between the two either in the numbers of finds or in their regional distribution.

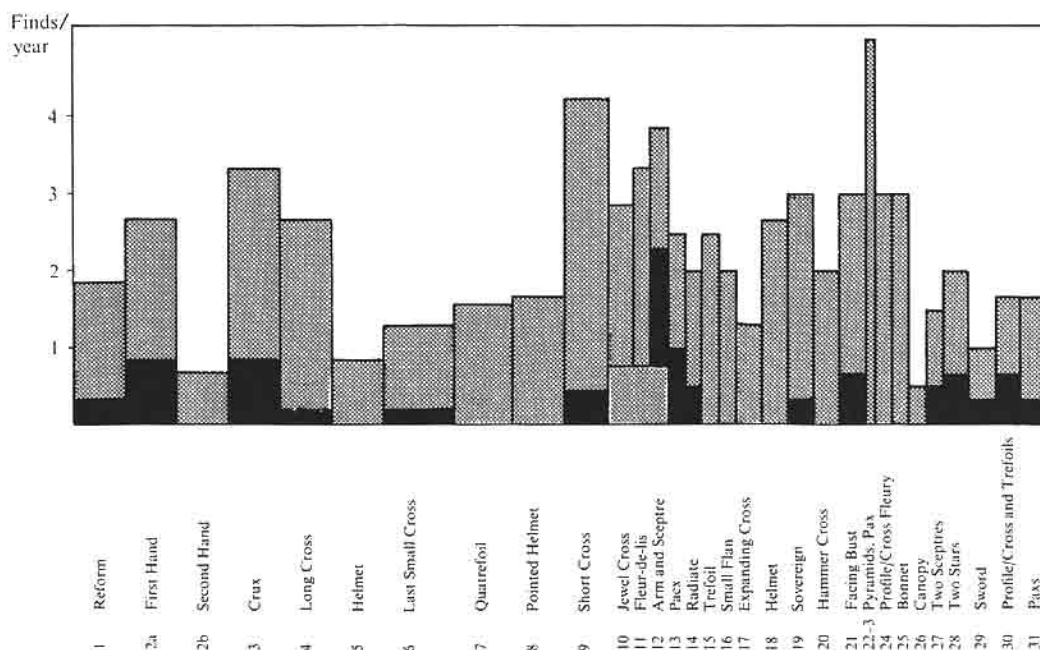


FIG. 2. Numbers of single finds per year in each type. The area of each column is proportional to the number of finds of the type. Cut fractions, within the totals, are shown in black. (Source: Appendix I.)

2. Cut halfpennies and cut farthings among the finds are somewhat more plentiful in the Reform type, First Hand, and Crux, that is at an early date (Fig. 2), and westerly provenances account for more than their fair share of these fractions. If there was a decline in the use of small change in the 990s it may reflect an accelerating monetary circulation, or a rise in prices.

The reappearance of fractions particularly from the years 1040–4 and 1074–83 is unduly influenced by the find-series from Meols and from Lincoln, and it may be partly fortuitous. In general, fractions are likely to have had a higher loss rate, but conversely a poorer rate of recovery.

3. The trend, type by type, in the numbers of single finds per annum is erratic, as it is bound to be when the numbers for each type are so small (Fig. 2). One is struck, however, by the low representation of that much-debated pair of types, Second Hand and Helmet. If one were simply comparing equal six-year periods, these two would be judged discrepant enough to be statistically significant. The height of each column in the histogram is a function of the number of finds divided by the duration of the type, and if these types were of shorter duration than the others from Æthelred's reign, the trend would look less erratic. But this is not the occasion to embark on a reappraisal of

the chronology. The arguments are uncertain and often conflicting, and they deserve to be judged as squarely as possible, not tangentially. Whatever their outcome, they will not lead to any change in the medium and longer-term trends which are our first concern here, since a 'swings and roundabouts' effect applies: if one type-period is shortened the adjacent one, or a nearby one, has to be correspondingly lengthened.

As regards Second Hand and Helmet, should we not expect that the finds would reflect the total numbers of each type in circulation in the English countryside (as there is no reason to imagine that the two types would have been any more or any less subject to accidental loss) multiplied by the length of time for which they remained in circulation? Both issues were relatively small, and the ratios of finds to the total numbers of dies used can hardly be said to be outside normal limits. But even this view involves an element of hypothesis: we do not know that the numbers of losses correlated with the size of the currency. Further, some single finds may in effect be mini-hoards, and therefore subject to different laws of behaviour from stray losses. (This might partly explain the exceptional number of finds of coins minted in 1065-6.) In Second Hand, two of the finds are from Leicester or its vicinity, but this may of course be pure coincidence. Again, if the preceding type was not demonetized, its continued availability would doubtless depress the numbers of stray losses of the new type. All told, the evidence is inconclusive.¹⁷ But we shall have to return to Second Hand and Helmet later.

For the rest, it will be better to begin by taking the broad tendency of the evidence, which is that there is no perceptible change in the rate of stray losses during the hundred years under review, in spite of the large variations in mint output which are discussed below. Last Small Cross and Quatrefoil, for example, were unusually large consecutive issues, but the recorded rate of stray losses is below average. Rigold noted a similar discrepancy for the twelfth to fourteenth centuries between the numbers of stray finds and the volume of minting.¹⁸ The stray finds are presumably the better index of the numbers of people handling coin and the level of transactions. The Conquest caused no significant change in the loss rate except possibly in the year 1066 itself; and the Paxs type, which is so plentiful today because of one very large hoard, is under represented.

4. The wide-ranging character of monetary circulation persists into the period 1017-87, with 60 per cent of the finds coming not from the local mint. The proportion rises to 67 per cent in the south and west. If the figures are broken down, and the period of more frequent type changes from 1035 onwards is considered separately, the figure is 62 per cent not from the local mint, even though the average age of a coin when it was lost may have been as little as between one and two years instead of three or four. If obsolete types were permitted to remain in circulation, the average life of the post-1035 coins may have been rather longer than two years, particularly in the 1060s, but the English hoard evidence is unfortunately far too fragmentary to allow one to quantify the changing proportion of obsolete coins from 1035 onwards.

Miss Archibald has observed that many finds which are not from the local mint are

¹⁷ I would therefore hesitate to argue, for example, that because there are few Helmet finds, the validity period of Helmet is likely to have been shorter than usual: it may have been, but this argument has little force.

¹⁸ S. E. Rigold, 'Small Change in the Light of Medieval Site-finds', in *Edwardian Monetary Affairs (1279-1344)*, ed. N. J. Mayhew (British Arch. Reports 36), Oxford, 1977, pp. 59-80; and p. 7.

nevertheless from a nearby mint, and that it would be nearer the mark to say that the currency tended to circulate regionally rather than nationally. There are many hoards which reinforce this impression. It could be that the two categories into which I divided Æthelred's coins, local and non-local, are such as to obscure a trend towards a more restricted circulation. In order to present the evidence as fully and fairly as possible, I have constructed diagrams to show approximately how far in kilometres each stray find was from its mint of origin, as the crow flies, and the finds have been plotted separately for the periods *c.*973–1017, 1017–51, and 1051–86 (Fig. 3). The unbroken curve to which each fan-diagram approximates speaks against the idea that there was any regional 'bar' to circulation beyond a certain distance, for example, in the range 50–100 km. Each time that a coin changed hands, it could of course be carried further away from its mint of origin, or back towards it: the diffusion was not continuously outwards like ripples from a stone flung into a pond, and the apparent rate of diffusion will therefore progressively slow down year by year.

Although the general appearance of the three diagrams is the same, coins undoubtedly tended to travel further during Æthelred's reign. The proportion of finds within 25 km (that is roughly the same as the suggested walking distance of 15 miles), and those lying between 25 and 100 km, and over 100 km can be compared in the pie-diagrams (Fig. 3). There are about the same proportion of local finds, but more middle-distance and fewer distant finds, in the later periods. This should not surprise us, as the coins had up to two or three times as long under Æthelred and Cnut (depending on our assessment of the later multi-type currency) to become scattered. Taking account of the uncertainty about the average life of a coin in circulation at different dates, monetary payments at a considerable distance seem to have continued to exert much the same influence or possibly even a greater influence over the pattern of diffusion of the currency.

The tendency of coins to wander seems not to vary much in different parts of England south of the Humber. The currency of York was more self-contained, partly no doubt as a result of its remoteness as the only mint in Northumbria, but partly perhaps because of the directions of its trade. The finds have been listed regionally (in Appendix I), so that all those from the west country, for example, can conveniently be considered together. We can analyse the evidence in another way, by plotting the direction as well as the distance over which each coin travelled from its mint of origin to its ultimate place of loss.

Rose-diagrams (Fig. 4*a, b*) show the results separately for the periods before and after 1035. They are a composite presentation of the evidence in that they amalgamate all the points of origin, wherever they were in the country, to a single point of origin, but since the movements of coins in different directions do not, in the resulting diagram, cancel each other out, it is probably fair to claim that they reveal the trend. Since both diagrams are constructed in the same way, the contrast between them should be valid evidence, since the ambiguities will be discounted to much the same extent. The differences suggest that there was a greater drift of currency towards the west and south-west in the earlier period. This may well have been because the currency was larger.

If there is a conflict between the evidence of the single finds and of the hoards as regards the proportion of the currency of non-local origin, the single finds are, as I see

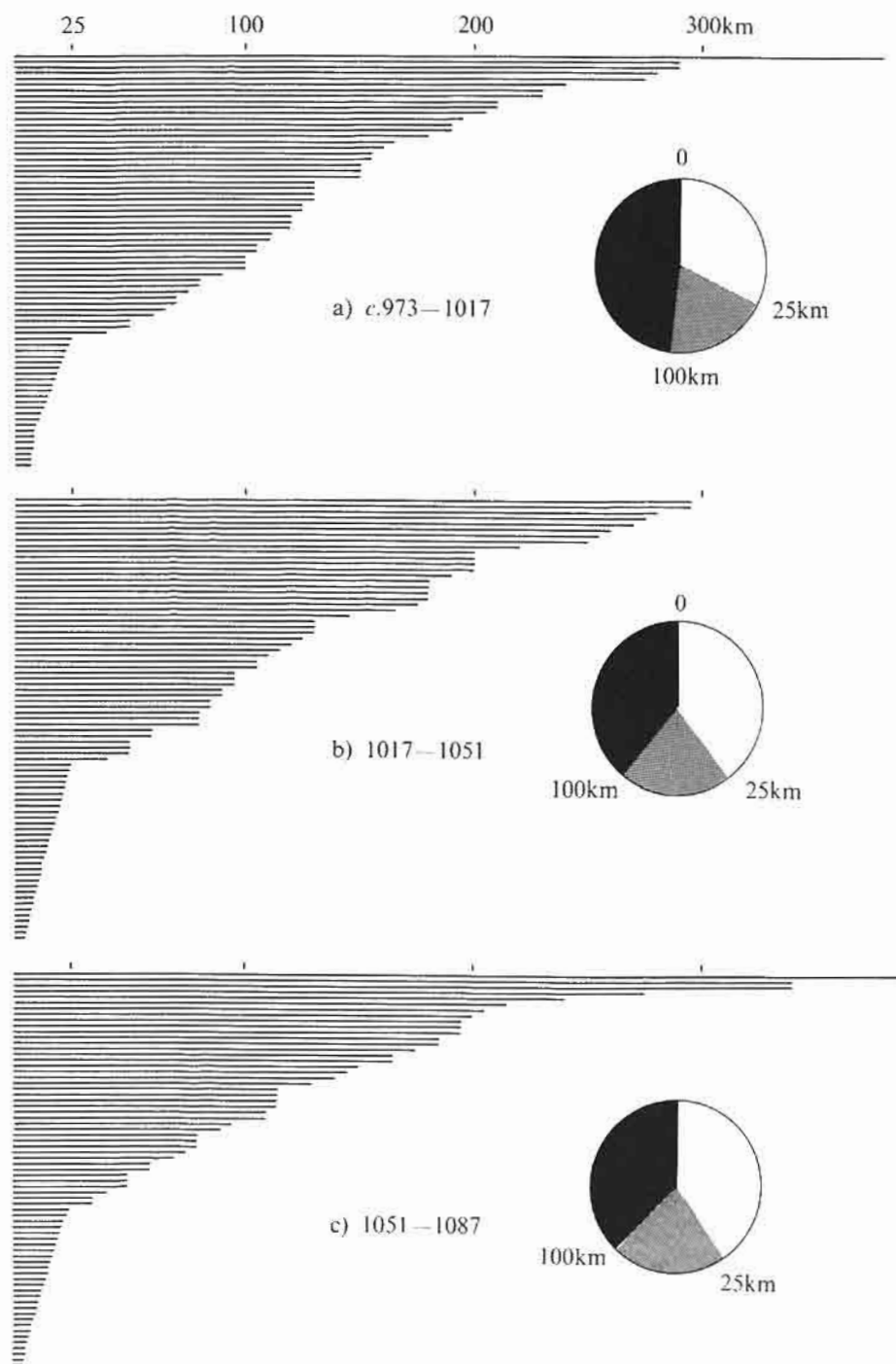


FIG. 3. Fan-diagrams of single finds arranged according to the distance from their mint of origin; pie-diagrams to show the proportion under 25 km, between 25 and 100 km, and over 100 km. (a) for coins minted c. 973-1017, (b) 1017-51, (c) 1051-86. In the fan-diagrams, finds in the category 'Yes' have been conventionalized by ranging them evenly between 25 and 10 km. (The detailed evidence is biased by the large number of coins from urban excavations, etc.) (Source: same as Fig. 1.)

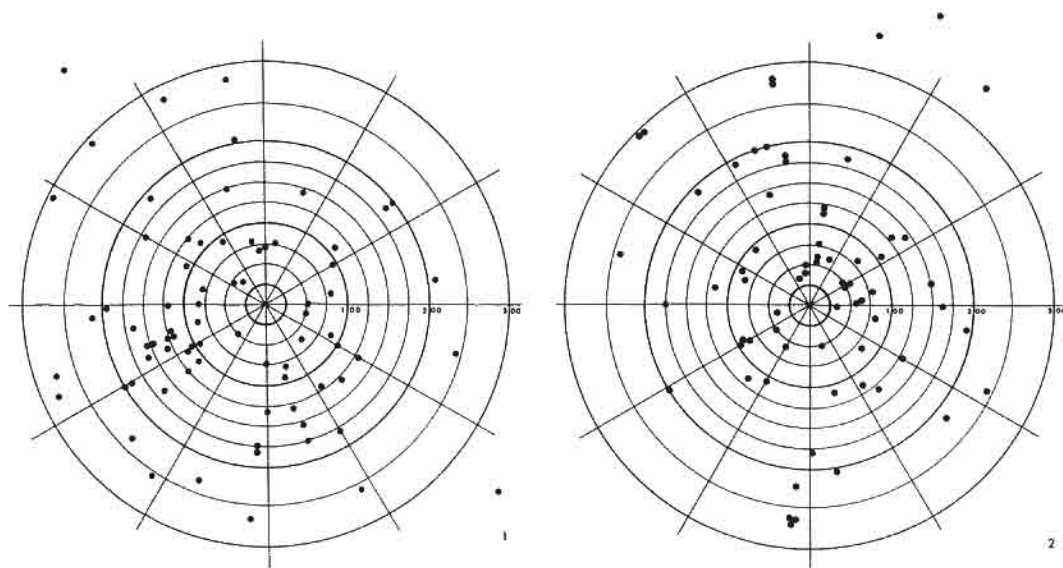


FIG. 4. Rose-diagrams to show the direction and distance of single finds from their mint of origin. (a) coins minted c.973-1035, (b) 1035-86. (Source: same as Fig. 1.)

it, not easily discounted, and this should make us think very hard about those hoards which have a distinctly local flavour. Consider, for example, the Sedlescombe hoard, which seems to offer particularly strong evidence of a local currency dominated by the Hastings mint, within which diffusion gradually took place, but so slowly that it was not until coins had been in circulation for at least eight or nine years that two-thirds of those in the Hastings area were from a non-local mint (Table 1):

TABLE 1
The Sedlescombe Hoard: Progressive Diffusion of Coins from the Hastings Mint

Type	Hastings, %	No. of coins
18 Helmet (c.1053-6)	29	125
19 Sovereign (c.1056-9)	47	114
20 Hammer Cross (c.1059-62)	64	714
21 Facing Bust (c.1062-5)	78	183

Source: I. Stewart, 'Sussex Mints and their Moneyers', *The South Saxons*, ed. P. Brandon (Chichester, 1978), p. 93.

If the Sedlescombe coins are, as they appear to be, a hoard withdrawn from the currency essentially at one particular moment rather than over a period of years—and in weighing this against the single finds, note the element of conjecture—they demonstrate that roughly two-thirds of the currency was from the local mint which, moreover, was a small mint (60 per cent of a total of 1136 coins in four types), instead of about 40 per cent as the single finds show us for the country as a whole. But can we be sure that this is a genuine conflict? Suppose that the owner of the hoard were a local

merchant who made his living by trading abroad and who therefore often had occasion to change his receipts of foreign coin at the Hastings mint, and who kept a fund of cash? This could radically influence the composition of his savings.

The Sedlescombe hoard also allows us to calculate a weighted figure for the average length of time between issue and the accidental loss of single finds which, if we assume that the hoard reflects the currency as it was early in the Facing Bust type, even though its non-recovery may be connected with the events of 1066, works out at just over three years. But again, one cannot know how trustworthy the hoard is as the basis for this particular conclusion.

When other hoards tell a similar story, however, the case becomes stronger. In the Harewood hoard, which seems to have consisted solely of the Pyramids type, again two-thirds of the coins were of the local mint, in this case Northampton.¹⁹ But one should add that the ten other coins were from eight different mints, the currency of Northamptonshire having become mixed to that extent in a remarkably short time.

Similarly, the little Norwich (Garlands) hoard of William's Profile/Cross Fleury type consisted of 64 per cent of coins of the Norwich mint.²⁰

Thus the hoard evidence and the evidence of single finds persistently differ, and by a margin which is too large to neglect. It is easier to envisage some bias in the hoards than in the single finds. For example, people may have been more inclined to put current money aside early on in the currency period of a type, and a habit such as that might go some way to explain the discrepancy. Or the hoards may mostly have been put together by traders in or near boroughs with mints, and this might have given an edge to the local mint in some way, for example, through the need to change foreign coin, whereas stray losses may have belonged predominantly to ordinary villagers. Several such factors, which could in no way be suspected from the hoard evidence itself, may have acted in combination. Possibly, for example, the 1060s (in which decade the hoard evidence is concentrated) saw some slowing-down in the velocity of circulation, which the statistics covering 1051-86 partly obscure: thus eight out of nine single finds of Facing Bust are local.

5. The proportions in which the major mints are represented among the stray finds do not differ significantly from their shares of the national output. The London and Southwark mints, for example, normally produced just about a quarter of the coinage, and they account for 21 per cent of the single finds which can be attributed to a mint. Similarly, Lincoln accounts for 9 per cent of the finds. (It seems reasonable to omit from both calculations the London coins found in London, and the Lincoln coins found in Lincoln.)

REGIONAL DISTRIBUTION OF MINTING

Against this background of a currency circulating widely and swiftly, we may next consider the regional²¹ distribution of minting. Under Æthelred, output was

¹⁹ R. H. M. Dolley, 'The Unpublished 1895 Find of Coins of Edward the Confessor from Harewood', *Yearbook of the British Association of Numismatic Societies*, vii (1961), 17-25.

²⁰ T. H. McK. Clough, 'A Small Hoard of William I Type I Pennies from Norwich', *BNJ* xliii (1973), 142 f.

²¹ The regions are the same as those used in the earlier

study of Æthelred's coinage. Their boundaries, which are broadly geographical in concept, can be deduced from the list of mints included in each. The regions do not all coincide with those adopted by Petersson, but are similar. On the dividing line between the Five Boroughs (i.e. Derby, Leicester, Nottingham, Stamford, and Lincoln) and the Eastern Danelaw, cf. the comment in C. R. Hart,

concentrated in the south and east of England, but there was noticeably little activity in the Home Counties, in spite of their relatively high population density and wealth (Table 2).

TABLE 2
Mint Output as a Percentage of the National Total by Regions

	c.973-1017	1017-51	c.1086
I. Hampshire Basin	12	8	20
II. The South-West	10	4	5
III. Kent and the Channel Ports	10	7	20
IV. London	25	25	15
V. Home Counties	3	3	5
VI. Eastern Danelaw	13	12	10
VII. The Five Boroughs	12	22	4
VIII. Chester and the West Midlands	6	10	16
IX. York and its Region	9	9	5

From 1017 onwards the Five Boroughs increase their share, and the south declines somewhat, but the other regions maintain very much the same position.

After about 1051 the evidence from which comparable figures might be calculated is lacking, as will be explained in more detail below, until we come to the Paxe type at about the time of the Domesday Book. We do not know how far this is typical of the earlier issues of William I, and the percentages set out in Table 2 are subject to margins of statistical uncertainty (see Appendix VII). Even so, it is clear the the Paxe type shows a decided swing to the south-coast towns and ports from Canterbury and Dover to as far west as Bristol, counterbalancing an equally marked decline at London, Lincoln, Stamford, and York. The major role of Winchester, and the growth of the Southwark mint relative to London, may be seen as symptoms of the southwards swing. The reasons for the change will require careful consideration, but it seems likely that they were political in that the change was at the least exacerbated, if not caused, by the hostility and distrust between William and the men of the Danelaw.

Having established a broad regional perspective, let us next look in more detail at the relative output of the individual mints.

RANKING OF THE MINTS

It is a familiar fact that in the first half of the eleventh century there were often fifty or sixty mints at work concurrently in England producing coins of identical design, and that altogether some ninety mint-places are known. Although this is true it may be to some extent misleading unless one adds that over half the total output was produced by only four or five mints, and that the number of mints taking more than 1 per cent rarely exceeded about twenty (see Appendix III). The rest were very small mints in terms of their output, and some of them seem to have worked only intermittently or occasionally.

in *The Early Charters of Northern England and the North Midlands*, p. 17; 'The line of demarcation between the carucated and the hidated shires was fixed, therefore, along the course of the River Welland, which with minor exceptions divided the territory of the Five Boroughs

from the shires of the County Hidage. The division was to persist until Domesday and later; and with rare exceptions bookland was never to be re-established, nor did the king's writ run, outside the hidated areas.'

From c.980 until c.1050 and probably later, London was always the premier mint; and from c.1000 until the Conquest London, Lincoln, and York almost always occupied the top three positions in the ranking table, with York usually in second place until c.1030, but giving way to Lincoln from then on. This stability serves to draw attention to the erratic ranking in the Reform/First Small Cross type, where Winchester, York, and Stamford rank first, second, and third. It may be due partly to the inadequate sample of coins in the Scandinavian hoards, but it could also reflect the smaller total mint output and a different regional pattern persisting for a few years until the new system of multiple weight-standards, favouring the inflow of foreign coin, took full effect.

York and Lincoln before the Conquest were much more active mints relative to London than they were to be in the twelfth to fourteenth centuries, and this presumably reflects, on the one hand, the greater importance of trade between the Danelaw and Denmark, fostered by ties of culture and sentiment, under the Anglo-Danish state, and, on the other hand, William's harrowing of the north, and a general widening of the gap from then on between the comparative wealth of the north and the south.

Under Cnut the three major eastern seaport-mints alone accounted for over 50 per cent of the national output.

The next three positions were generally occupied, from c.1000, by Winchester, Stamford, and Thetford. Norwich and Chester were not far behind.

From one type to the next, the rest of the top twenty mints maintain roughly the same positions in ranking order in the medium term. Exeter and Oxford are good examples, as may be seen by following them through the table (Appendix III). A mint could gradually work its way up the list, or it could slip downwards. Then, on the other hand, there are just one or two cases where a mint rises suddenly to prominence, and as suddenly falls away again. Lymne was active in the Reform/First Small Cross type, and Southampton in First Hand. Dover is the prime example, jumping to sixth place c.1030, in a phase of brisk activity that covered only ten or fifteen years. Although there has been a lot of careful excavation at Dover,²² there seems to be nothing in the archaeological record which would tie in with, or help to explain, the numismatic evidence. Dover is exceptional: as a rule, the larger mints take quite a steady share.

This aspect of the evidence is more difficult than any other to explain convincingly. Even though mint output may vary greatly from one type to the next, all the larger mints, and perhaps the smaller ones as well if we had an adequate statistical basis from which to judge, tend to go up or down together, maintaining much the same ranking order. One might have expected that when the currency was growing, through the net import of foreign silver, the mints in the ports of entry would have taken a larger share than when the currency was actually dwindling in size, but this does not happen. If the mints are grouped in terms of ports, inland places, larger mints, small mints, north versus south, etc., the groups continue to behave with an impressive conformity, as may be seen in Fig. 5 (Second Hand looks erratic chiefly because of the large output at London). We might attempt an explanation of this conformity in general terms by suggesting that the import of silver continued quite steadily, and that whether the

²² See *Medieval Archaeology*, xv (1971), 126 f., mentioning the late Saxon town within the walls of the Saxon Shore fort; and *ibid.* xxii (1978), 147.

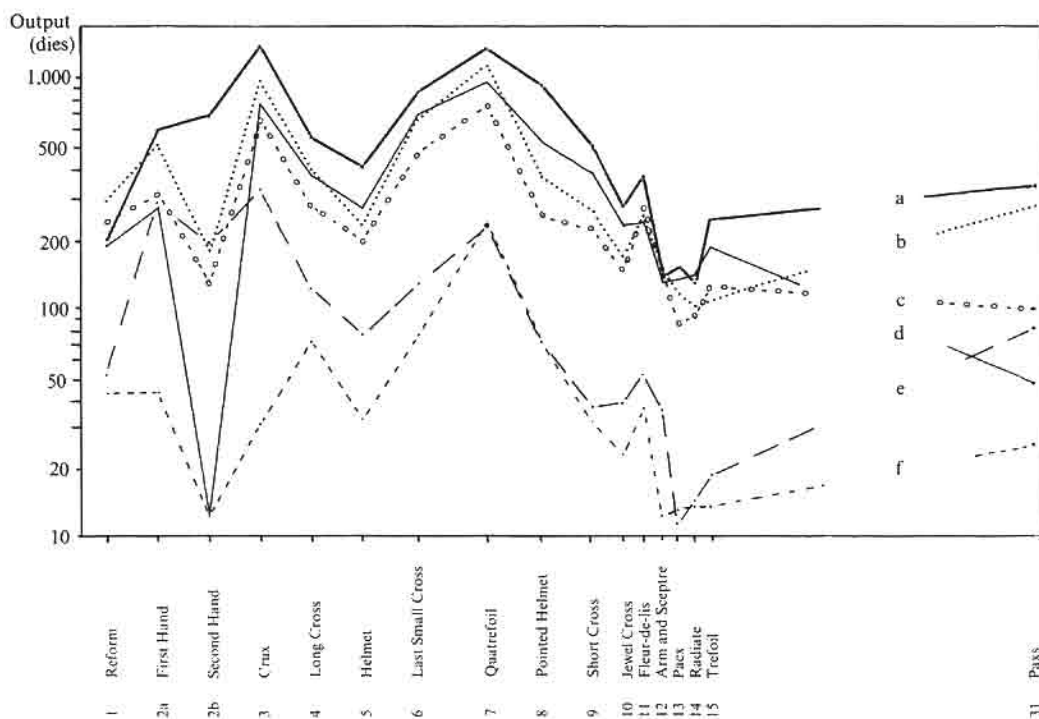


FIG. 5. Estimated mint-output, grouped as follows: (a) London and the Channel Ports, (b) small inland mints, (c) large inland mints, (d) east-coast ports, (e) western ports, (f) Chester. Semi-logarithmic: the same angle of slope represents the same rate of change. (Source: Appendix IX.)

currency was growing or dwindling depended more on the outflows. But the pattern remains puzzling.

The stability which is the keynote from c.980 to c.1050 suggests that the dominant reason or reasons for striking coin at the larger mints lay in the more settled aspects of political or economic life. If particular events affecting a borough or a region had loomed larger among the reasons for minting there would be more conspicuous irregularities in the ranking orders. In 1044 and again in 1045, for example, Edward was in command of the fleet at Sandwich, and in 1049 in alliance with the Emperor he blockaded Flanders from Sandwich. The Sandwich mint is active precisely in the four types minted between 1042 and c.1050, but its output is of the order of half of one per cent of the national total.

As another example, Winchcombe in the northern Cotswolds became for a short time the shire town of Winchcombeshire, as a result of an administrative reform c.1007 which was revoked c.1017.²³ The mint of Winchcombe was active from c.991 to c.1030, rarely using more than about four reverse dies in each type; but in Last Small Cross, which coincides quite closely in date with the enhanced status of the place, rather than showing a burst of activity the mint seems not to have worked at all.

²³ H. P. R. Finberg, 'The Ancient Shire of Winchcombe', in idem, *The Early Charters of the West Midlands*

(Leicester, 1972), pp. 228-36. The dates c.1007 and 1017 as argued there are admittedly to some extent conjectural.

The trend in the total number of mints at work in each type is again probably one of little change. Our knowledge on this point is imprecise because we have insufficient coins—whether from English or Scandinavian sources—from which to judge. The uncertainty can be demonstrated in this way: among 2900 Quatrefoil coins in the

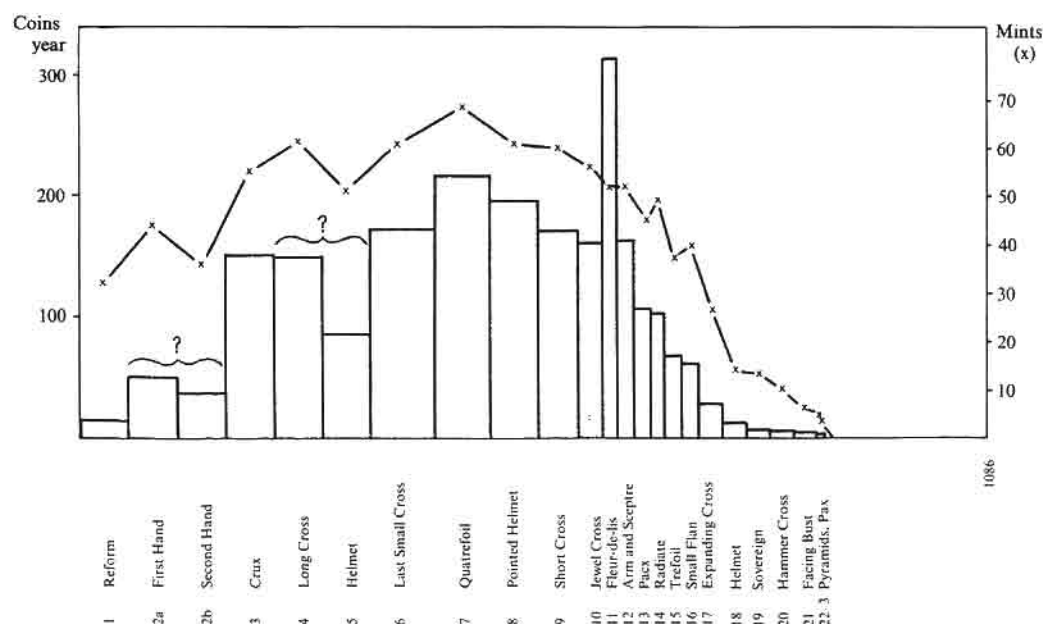


FIG. 6. Coins per year in the Stockholm systematic collection. The area of each column is proportional to the number of coins; conventional dating as in Fig. 2, etc. (Source: *Ethelred the Unready*, pp. 206-8, and similar data extracted from Appendix III, below.) Numbers of mints represented in the Swedish and Danish finds, type by type. (Source: Appendix XI.)

Scandinavian collections and, similarly, among 2750 Helmet coins of Cnut, there are several mints represented by only one coin, or 0.03 per cent of the total. For many other types of which less than 1000 coins survive, the chances are that two mints out of three having that share of the national output would not be represented.

The number of mints among the Scandinavian finds rises from thirty-two in the Reform type to sixty-eight in Quatrefoil and falls to single figures in the 1060s. It seems to be mainly a function of the numbers of finds of each type (see Fig. 6).

Where these numbers are small, they are inevitably subject to rather wide margins of statistical uncertainty and to serious distortion by other kinds of sampling error. Some of the fluctuations in the figures may therefore be apparent not real, and it is important to be clear exactly how the estimates of mint output are derived.

(To be continued)

APPENDIX I

SINGLE FINDS, c.973-c.1087

The finds have been grouped into the same nine regions as have been used for purposes of analysis in the text. Finds from Wales are listed in a tenth section. Finds from Scotland are not listed. The historic counties are given, using the abbreviations of the English Place-Name Society, followed by the present-day counties, if different, in parentheses. Distances from the mint of origin are in kilometres. Yes/No shows whether the coin is from the local mint.

I. Hampshire Basin

ALDBOURNE, W

Æthelred, type?, mint?

M. Crane, *The Aldbourne Chronicle*, p. 2; A. D. Passmore's notebook in *Devizes Mus.*, p. 5, and J. W. Brooke's notebook, *ibid.*, pp. 1 and 217; but Passmore says the coin was of Æthelred I. Inf. P. H. Robinson

(?)

COMPTON, Ha

Æthelred, Long Cross, London?, cut half

No (110)

NCirc. lxxxvii (1979), 380

FOXCOTTE, Ha (d.m.v., SU 345 474)

William, Profile/Cross Fleury, Winchester

Yes (20)

Excav. 1979. Inf. J. Walker (Test Valley Arch. Ctce.)

AXFORD, W

Harold II, mint?

Rep. Marlborough Coll. Nat. Hist. Soc. 1891/2, 58; *Wilts. Arch. Mag.* xxvi (1892), 416; possibly *SCBI West Country* 744 (London), but this is problematic

(?)

GREAT BEDWYN, W

France, '11th-century denier'

(—)

Wilts. Arch. Mag. liii (1949-50), 273. This coin is in fact a double tournois of Philip IV, 1285-1314: inf. P. H. Robinson

BAVERSTOCK, W

Cnut, Quatrefoil, Ilchester

No (50)

Somerset Arch. and Nat. Hist. Soc. cxxiii (1979), 110

IDMISTON, W

Edward, Facing Bust, Wilton

No (12)

SCBI West Country 736. (Acquired 1949. Cf. Kimpton. Some doubt may arise whether these two coins could be from a single discovery, but see below.)

BISHOPS WALTHAM, Ha

Edward, Helmet, Winchester

Yes (15)

SCBI Mack 1222

KIMPTON, Ha

Edward, Facing Bust, Wilton

Yes (25)

SCBI West Country 970. (Acquired 1967. Presumably this is the same coin as one that was shown in the British Mus. in 1967, when it was stated to have been found about half a mile from a Deverel Rimbury urnfield site at Kayes Corner. This information makes it unlikely that the Kimpton find is from a pre-1949 hoard, cf. Idmiston.)

CADLEY, W

William, type?, mint?

(?)

Rep. Marlborough Coll. Nat. Hist. Soc. 1889, 114

CARISBROOKE, Wt

Æthelred, Second Hand, London

No (125)

Proc. L.o.Wight Nat. Hist. & Arch. Soc. v (1959), 157-9

MEON HILL, Ha (1 km W. of Stockbridge)

Edward, Helmet, Winchester

Yes (15)

Proc. Hants. Field Club xii (1933), 154; Winchester City Mus. 1452.

CERNE ABBAS, D

Spain, *AR* dirham, Hisham II, AD 999/1000, looped

(—)

Found in the ruins of Cerne Abbey c.1807. Dolley in *NC* (1957), 242-3

Cnut, Helmet, Winchester

No (85)

SCBI West Country 629 (in garden of the Old Tythe Barn)

MILDENHALL, W

Æthelred, Long Cross, Lincoln

No (230)

Wilts. Arch. Mag. 72-3 (1977-8) (1980), 198-9.

<p>NETHERTON, Ha Æthelred, First Hand, London Cnut, Quatrefoil, Winchester, cut half Excav. Inf. M. M. Archibald Normandy, denier, PA 166 (pl. VI, 10) Inf. M. M. Archibald</p>	<p>No (120) (—)</p>	<p>SOUTHAMPTON, Ha (near) William, Profile/Cross and Trefoils, London <i>BMC Norman Kings</i> 465 STONEHENGE, Wi Æthelred, Long Cross, London <i>SCBI West Country</i> 536; <i>Antiq. Jf v</i> (1925), 34. (Excav.)</p>	<p>No (115) No (125)</p>
<p>OLD SARUM, Wi Eadgar, London Ledwich, <i>Antiq. Sarisbur.</i> 1771. Possibly erroneous; the illustration is of another coin, now in the British Mus., ex Pembroke Utrecht, Bishop Bernaldus, 1027–54 Dolley and Van der Meer, <i>JMP</i> xlv (1957), 54–6; <i>SCBI West Country</i> 1010. (Excav.) William, Sword, Wareham <i>SCBI West Country</i> 769. (From cesspit in East Suburb.) Old Sarum, <i>see also</i> Salisbury</p>	<p>No (130) (—) No (50)</p>	<p>TILSHEAD/SHREWTON, W Æthelred, Crux, Canterbury Dolley, <i>BNJ</i> xxviii (1955–7), 83 WINCHESTER, Ha Æthelred, Long Cross, London St. James's Cemetery, before 1926 Edward, Helmet, Winchester Cathedral Cemetery, before 1925 Edward, Pyramids, Chichester Lower Colebrook St. The above three coins: Winchester City Mus. Inf. A. J. H. Gunstone</p>	<p>No (210) No (95) (Yes) No (45)</p>
<p>OSMINGTON, D Cnut, Short Cross, Stamford <i>SCBI West Country</i> 643; provenance given as Osonington</p>	<p>No (250)</p>	<p>Æthelred, Crux, Maldon, cut half Æthelred, Last Small Cross, London, plated forgery Cnut, Quatrefoil, Ipswich Cnut, Helmet, Winchester Normandy, denier from at latest 1030–40</p>	<p>No (155) (—) No (200) (Yes) (—)</p>
<p>POOLE, D Edward An Edward Confessor penny found on an excavation in c.1977 was a spurious find, 'planted' there. Inf. D. A. Hinton</p>	<p>(—)</p>	<p>Harthacnut, Jewel Cross, Gloucester Harthacnut, Jewel Cross, Shaftesbury Harold I, Fleur-de-lis, London Edward, Expanding Cross, Winchester</p>	<p>No (115) No (60) No (95)</p>
<p>SALISBURY, W Edward, Trefoil-Quadrilateral, Salisbury <i>NC NS vi</i> (1866), Proc., p. 9</p>	<p>(Yes)</p>	<p>William, Canopy, Malmesbury William, Sword, Shaftesbury William, Sword, Salisbury?, cut half William, Profile/Cross and Trefoils (<i>sic</i>), London, cut half</p>	<p>No (80) No (60) No (35) No (95)</p>
<p>SALISBURY PLAIN, W Magnus the Good, 1042–7 Dolley, <i>NNUM</i> 1957, 253–6</p>	<p>(—)</p>	<p>Dolley and Blunt, <i>BNJ</i> xlvii (1977), 135–8</p>	<p>No (95)</p>
<p>Shrewton, <i>see</i> Tilshead</p>		<p>II. West Country</p>	
<p>SILBURY HILL, W Æthelred, Last Small Cross, cut farthing, mint? Moneyer ... hwoold. Inf. C. S. S. Lyon</p>	<p>No (?)</p>	<p>CHEDDAR Palace, So Æthelred, Crux, London or Southwark, cut half Æthelred, Long Cross, Thetford Cnut, Short Cross, Oxford</p>	<p>No (190) No (275) No (120)</p>
<p>SOUTHAMPTON, Ha Æthelred II?, no details Addyman and Hill, in <i>Proc. Hants. Field Club</i> xxv (1968), 86, no. 24</p>	<p>(?)</p>	<p><i>Med. Arch.</i> vi vii (1962–3), 53–66; <i>Proc. Somerset Arch. & Nat. Hist. Soc.</i> cviii (1963–4), 99–112; <i>SCBI West Country</i> 470, 578, 642</p>	

EXETER, D		William, Bonnet, Oxford, mounted as brooch		No (110)
Æthelred, Helmet, Exeter	(Yes)	A. Down, <i>Chichester Excavations</i> iii (1978), pp. 85, 340, and inf. L. E. Knowles (Chichester Mus.) and A. J. H. Gunstone		
Dolley, <i>Cunobelin</i> x (1964), 26-9				
GLASTONBURY, So		DOVER, K		
Edward, type?, mint?	(?)	Harthacnut, type?, Dover	(Yes)	
Excav. on Abbey site. <i>Antiquity</i> xxvii (1953), 41; <i>ibid.</i> xxix (1955), 33 f. Apparently since stolen from Abbey collection. Inf. S. C. Minnitt		<i>Proc. Num. Soc.</i> , 25 May 1843 (p. 104); <i>NC</i> vii, 202		
HUNTSPILL, So		Cnut, Short Cross, Dover, cut half	(Yes)	
Edward, Pacx, Exeter	No (60)	Inspectorate of Anc. Mon. Inf. M. Wood		
<i>SCBI West Country</i> 666		HASTINGS, Sx		
ILCHESTER, So		Edward, Hammer Cross, Hastings	(Yes)	
Æthelred, Second Hand, Exeter	No (70)	<i>SCBI Fitzw.</i> 916 (could be ex Sedlescombe?)		
Excav. 1974. Identification, M. Dolley. Taunton Mus. Inf. S. C. Minnitt		HELLINGLY, Sx		
LYDFORD, D		Æthelred, Helmet, Lewes gold penny	(Yes)	
Æthelred, Last Small Cross, Lydford	(Yes)	<i>BMC</i> 1; M. Dolley, <i>Anglo-Saxon Coins</i> (1970), frontispiece.		
The provenance is only presumed. <i>Trans. Devon Assocn.</i> lxxxiv (1952), 248; <i>SCBI West Country</i> 586		LEWES, Sx		
NORTH CURRY, So		Edward Martyr, London	No (70)	
Æthelred, Long Cross, Winchester	No (120)	Discovered on the surface in disturbed soil in roadworks at the Landport. Barbican House Mus. 1975.37. Inf. M. M. Archibald		
<i>SCBI West Country</i> 558		Harold I, type?, mint?	(?)	
PLYMOUTH, D		Maydwell sale, 15 March 1848, 30		
Harthacnut, Jewel Cross, Guildford	No (270)	Edward, Hammer Cross, Wareham	No (150)	
<i>BMC</i> 3. Found in Plymouth churchyard, 1852. Inf. M. M. Archibald		C. Warne, <i>Ancient Dorset</i> (Bournemouth, 1872), p. 299 and pl. 2, 27. From Lewes Priory		
SALTFORD, So (Avon)		NEWCHURCH, K		
William, Two Stars, London	No (165)	Æthelred, Long Cross, Bath	No (240)	
<i>SCBI West Country</i> 762		<i>SCBI Yorks.</i> 1035A.		
III. Channel Ports		OLD ERRINGHAM, Sx		
ALFRISTON, Sx		Æthelred, Second Hand, Canterbury	No (105)	
Normandy, denier, PA 176 (pl. VI, 20)	(—)	Æthelred, Long Cross, Lewes	(Yes)	
Inf. M. M. Archibald. Second half of eleventh century?		<i>Med. Arch.</i> ix (1965), 170-8 and 179-220. Lewes Mus. Inf. A. J. H. Gunstone		
CANTERBURY, K		RICHBOROUGH, K		
Harold I, Jewel Cross, Dover	No (23)	Æthelred, Hand, mint?, clipped (ie. broken?)	(?)	
Edward, Facing Bust, Canterbury, cut half	(Yes)	In <i>Richborough</i> v. 223 this coin is listed as Second Hand (?), but this rests on Roach Smith's original description of 'the type of Hawkins. pl. XVI, 206' - which is the only Hand coin on pl. XVI		
Excav. St. Augustine's, 1976 and 1978 respectively, inf. M. Wood		CHICHESTER, Sx		
CHICHESTER, Sx		Æthelred, Second Hand, London	No (90)	
Æthelred, Second Hand, London	No (90)	Edward, Radiate, Bath	No (130)	
Edward, Radiate, Bath	No (130)			

Cnut, Short Cross, Chester <i>Richborough v, 223</i>	No (365)	William, Paxis, Thetford (<i>...d on Th...</i> , Folcaerd or Godred)	No (110)
ROLVENDEN, K Cnut, Short Cross, Lincoln <i>Inf. M. M. Archibald</i>	No (255)	BM 1935-4-9, 21-34 (<i>inf. M. M. Archibald</i>). These include coins from the Honey Lane hoard, as discussed by Dolley in <i>NC⁶ xviii</i> (1958), 99-102. Of the non-hoard coins (1-5 and 7-10 above), nos. 1, 2, 4, 5, 7, and 8 correspond with those described in C. R. Smith, <i>Cat. of the Museum of London Antiquities</i> (1854), nos. 568-9, where the Dover coin is also described. No. 3 above is of the same mint and moneyer as a Long Cross coin listed in 1854 as <i>...ertlar mo Stan</i> , which is in the collection (<i>NC⁶ xviii</i> , 1958) but not in the register	
WORTHING, Sx Eadgar, type?, mint?	(?)		
<i>Excav. St. Cuthman's Field, 1967. Inf. A. J. H. Gunstone</i>			
Edward, Helmet, London <i>Fd. Chesswood Nurseries, 1958. Inf. A. J. H. Gunstone</i>	No (80)		
IV. London			
LONDON			
In the mid nineteenth century extensive alterations were made in the City of London, for the purpose of widening the old streets and making new ones, and also for improving the sewerage. At the same time, the bed of the Thames near London Bridge was deepened. Many coins were found in the mud. Roach Smith's collection of antiquities was formed by 'incessant personal exertion and solicitude in watching the [street-]works and encouraging the labourers, by the most persuasive of all arguments'. Four other large collections of antiquities were formed at the same time. Hilton Price, for example, acquired numerous Anglo-Saxon coins, all of which had been found in London.			
Regrettably, most of this information has been lost. Roach Smith's coins, which were transferred from the Department of British and Medieval Antiquities to the Department of Coins and Medals at the British Museum in 1935, lack any formal provenance. Characteristically they have a black patina. Although one cannot be certain that every one of them is a London find, it need not be doubted that those listed below are from London.			
Æthelred, Crux, London (Byrhtlaf)	(Yes)	Æthelred, Agnus Dei, Derby <i>NC³ xix</i> (1899), 344. Gracechurch Street. Some doubt has been expressed about this provenance	No (180)
Æthelred, Last Small Cross, Lewes	No (70)		
Æthelred, Last Small Cross, Stamford	No (130)	WESTMINSTER, Mx (G. Lond.) Conrad II, Duisburg <i>Trans. London and Mdx. Arch. Soc.</i> xxviii (1977), 200	(—)
Æthelred, Last Small Cross, Winchester	No (95)		
Cnut, Helmet, London (Edwine)	(Yes)	V. Home Counties	
Cnut, Short Cross, Dover	No (105)	ABINGDON, Brk (O) Cnut, Short Cross, Lewes <i>Oxoniensia</i> xl (1975), 46	No (125)
Cnut, Short Cross, London (God)	(Yes)	ASTON UPTHORPE or ASTON TIRROLD, Brk (O) Æthelred, type?, Wallingford W. R. Davies sale cat. (App. II)	(Yes)
Cnut, Short Cross, London (Wulfred)	(Yes)	BENSON, O Æthelred, First Hand?, Ipswich W. R. Davies sale cat. (App. II). Described as Hand, Leofric mo Gipes. The moneyer is recorded in Hild, 1058 for Bl	No (165)
Edward, Small Flan, Canterbury	No (85)	William, Profile/Cross Fleury, Wallingford W. R. Davies sale cat. (App. II)	(Yes)
		BEXLEY, K William, Paxis, Lincoln <i>Inf. A. J. H. Gunstone</i>	No (205)
		BOVINGDON, Hrt Æthelred, London, Helmet Sotheby, 21 June 1909. Rashleigh, ex Evans. Found 1850	Yes (40)

BRIGHTWELL-CUM-SOTWELL, Brk (O)		MORETON (near), Brk (O)	
Æthelred, type?, Wallingford	(Yes)	Edward, type?, Winchester	No (60)
<i>VCH Brk</i> iii, 546 (inf. W. R. Davies). Found near The Severalls (= Clapcot)		W. R. Davies sale cat. (App. II)	
Edward, type?, Oxford	No (20)	OXFORD	
W. R. Davies sale cat. (App. II). Found at Rush Court (estate), 605 917 appr.		Æthelred, First Hand, mint?	(?)
		<i>SCBI Oxford</i> 453 (Littlewoods, 1962)	
		Edward, Paxx, mint?, fragment	(?)
		Excav. All Saints Church. N. J. May- hew (ed.), <i>Edwardian Monetary Affairs</i> (1977), p. 86	
CHOLSEY, Brk (O)		William, Paxx, Wallingford	No (20)
Edward, Sovereign, Wallingford	(Yes)	W. R. Davies sale cat. (App. II)	
W. R. Davies sale cat. (App. II)			
CROWMARSH GIFFORD, O		RAYs (nr. Wallingford?)	
Edward, type?, York	No (260)	William, type?, Winchester	No (70?)
W. R. Davies sale cat. (App. II)		W. R. Davies sale cat. (App. II)	
DORCHESTER, O		SOTWELL, Brk (O)	
Cnut, type?, York	No (260)	Harold I, Fleur-de-lis (Leofwine), Norwich	No (200)
W. R. Davies sale cat. (App. II), moneyer Asgut		W. R. Davies sale cat. (App. II); Good- acre coll. (bought 1903)	
EWELL, Sr (in or nr.)		SOUTH CROYDON, Sr (G. Lond.)	
Æthelred, Helmet, London	(Yes)	Continental (Sens?) PA pl.	
<i>Surrey Arch. Coll.</i> xxvi (1913), 137		CXXXVII, 5	(—)
EYNSHAM, O		Eleventh century? Both the date and the attribution of this type are problematic.	
Cnut, Quatrefoil, Exeter	No (190)	Inf. M. M. Archibald	
Found on the site of Eynsham Abbey by Mr Ashton. ISEGOD ON EAXE OF EAXEAC. 0.97 g. Inf. Major Oakeley, 1967		UNION (nr. Wallingford?)	
		Edward, type?, York	No (260)
GUILDFORD, Sr		W. R. Davies sale cat. (App. II)	
Edward, Radiate, Lincoln, cut half	No (220)	WALLINGFORD, Brk (O)	
<i>Surrey Arch. Coll.</i> xxxix (1931), 32. Excav. Guildown Saxon cemetery		Æthelred, First Hand, Cricklade, cut half	No (50)
HETHERINGTON (nr. Wallingford)		Brooks in <i>Cricklade Hist. Soc. Bull.</i> iv (1967), 5; <i>Med. Arch.</i> i (1967), 272-319; Reading Mus. Inf. M. A. S. Blackburn	
Æthelred, type?, London	No (70?)	Cnut, Short Cross, mint?, cut farth- ing	(?)
W. R. Davies sale cat. (App. II)		<i>NC⁺ xvii</i> (1977), 137 n. 1	
KINGSTON-ON-THAMES, Sr (G. Lond.)		Edward, possibly Hammer Cross, Rochester	No (115)
Æthelred, Long Cross, London	(Yes)	W. R. Davies sale cat. (App. II). The moneyer's name is given as Lifwine in a letter to Evans	
<i>SCBI Oxford</i> 539			
LITTLE WITTENHAM, Brk (O)		WARBOROUGH, O	
Æthelred, Crux, Barnstaple	No (210)	Edward, type?, York	No (260)
<i>NC NS</i> vii (1867), Proc., p. 8		W. R. Davies sale cat. (App. II)	
LONGWORTH, Brk (O)			
William, Bonnet, Oxford	(Yes)	WELFORD, Brk	
<i>SCBI Oxford</i> 33		Edward, type?, mint?	(?)
MIDDLETON STONEY, O		<i>VCH Brk</i> iv, p. 122	
William, Profile/Cross and Trefoils, London	No (90)		
Excav. 1979. Inf. J. G. Rhodes			

WOODEATON, O			Lane, 1961. Identification by Dolley.
William, Two Stars, Oxford	(Yes)		<i>Proc. Suffolk Inst. Arch.</i> xxix (1963), 313
<i>SCBI Oxford</i> 88			
VI. Eastern Danelaw			
BURY ST. EDMUNDS, Sf			Edward, Trefoil-Quadrilateral, London
Harold I, Fleur-de-lis, Lincoln	No (130)		Excav. Elm Street, 1975. Clough and Archibald, <i>BNJ</i> (forthcoming)
<i>Suffolk Inst. Arch. JI</i> 1869, 36			
CAMBRIDGE			IXWORTH, Sf
Æthelred, Crux, London	No (75)		Edward, Radiate, Hertford
<i>SCBI Cambridge</i> 662			Edward, Helmet, Chester
			Edward, Helmet (head r.), Lincoln
			<i>Suffolk Inst. Arch. JI</i> 1869, 36
CASTLE ACRE, Nf			MUCH HADHAM, Hrt
Edward Martyr, Derby	No (135)		Æthelred, Last Small Cross, Winchester, contemporary counterfeit (cliché)
<i>Seaby's Bulletin</i> 1980, 386			
Edward, Sovereign, Stamford	No (80)		<i>BNJ</i> xxviii (1955-7), 185 9; Oddy and Archibald, <i>Scientific Studies in Numismatics</i> (ed. Oddy), 1980, p. 82
Edward, Facing Bust, Thetford, cut half	Yes (35)		
Excav. at the castle site. Inf. M. M. Archibald			
CASTLE RISING, Nf			NORTHAMPTON
Æthelred, First Hand, Stamford	No (80)		Edward, Trefoil-Quadrilateral, London
Inf. B. Morley			<i>SCBI Midlands</i> 368; (?) cf. <i>VCH Np</i> i, 255
DUNWICH, Sf			
William, type?, London, cut farthing	No (145)		NORWICH
William, type?, mint?	(?)		William, type?, Leicester
<i>BNJ</i> v (1908), 127			<i>NC</i> ° xviii (1958), 91
GREAT SHELFORD, Ca (TL 461 526)			William, Profile/Cross Fleury, Norwich
Edward, type?, Cambridge	(Yes)		William, Bonnet, York
<i>Proc. Cambr. Antiq. Soc.</i> xxvi (1923-4), 133.			William, Two Sceptres, Thetford
			<i>SCBI Yorks</i> 1111, 719, 1193 (from a hoard?)
GREAT YARMOUTH, Nf			
Edward, Hammer Cross, Nottingham	No (195)		OUNDLE, Np
Excav. Fullers Hill. <i>East Anglian Arch.</i> ii (1976), 161			William, Profile/Cross Fleury-Bonnet mule, Stamford
			Sharp, in <i>NC</i> ns ix (1869), 354, no. 3
HADSTOCK, Ess			PETERBOROUGH, Np (Ca)
William, Two Stars, London	No (75)		Æthelred, Last Small Cross, Lincoln
<i>BMC</i> 336			Peterborough Mus. Inf. A. J. H. Gunstone
HARPENDEN, Hrt			Harold, type?, mint?
Æthelred, type?, Hertford	(Yes)		Edward, type?, mint?
<i>Trans. E. Herts Arch. Soc.</i> xiii (1950/1), 60. Provenance doubtful: may just be a collection of local interest.			<i>NC</i> ° xviii (1958), 92. Found before 1787
IPSWICH, Sf			RAMSEY, Hu (Ca)
Æthelred, Small Crux, Stamford	No (130)		Cnut, Helmet, York
<i>SCBI East Anglia</i> 1177; excav. Cox			<i>Seaby's Bulletin</i> 1966, 405

ST. NEOTS, Hu (Ca)		
Harthacnut, Arm and Sceptre, Stamford	No (50)	
<i>Proc. Camb. Antiq. Soc.</i> lxiv (1972-3), 95-6		
SOUTHWICK, Np		
Harold I, Fleur-de-lis, Stamford	(Yes)	
Dolley, <i>Durobrivae</i> , iv (1976), 20 f.; <i>Seaby's Bulletin</i> 1975, 381; <i>SCBI Lincs</i> 1375		
STOWMARKET, Sf		
Cnut, Helmet, London	No (110)	
<i>Suffolk Inst. Arch. JI</i> 1869, 36; J. Warren sale, Sotheby 22 March 1869		
SUFFOLK		
Harthacnut, type?, mint?	(?)	
SULGRAVE, Np		
Æthelred, Long Cross, London	No (110)	
Blackburn, <i>NC</i> xix (1979), 217-19		
THETFORD, Nf		
Æthelred, Crux, Thetford	(Yes)	
Harold I, Jewel Cross, Thetford	(Yes)	
Harold I, Jewel Cross, Norwich	No (50)	
<i>NC</i> xvi (1957), 206		
Æthelred, Crux, mint? (not Thetford), cut farthing, moneyer Goda?	No (?)	
Cnut, Quatrefoil, Thetford	(Yes)	
Excav. G. M. Knock. <i>BNJ</i> xxix (1958), 189 f.; <i>SCBI East Anglia</i> 1176 and 1227		
Æthelred, Crux, Lincoln	No (130)	
Norway, Olaf Kyrre (1067-93)	(—)	
Excav. 1966 and 1964 respectively by B. J. Davison, the 1964 season yielding also a Crosses Pattée and Fleury coin of William II (c.1095-8). Inf. M Wood		
WELLINGBOROUGH, Np (near)		
Cnut, Helmet, York	No (180)	
Cnut, Helmet, York	No (180)	
<i>SCBI Midlands</i> 334 and 336 (hoard?)		
WELWYN, Hrt		
Edward, Small Flan, London	No (40)	
<i>Num. JI</i> ii (1837), 252-3; <i>NC</i> xvi (1958), 93 f.		
WHEPSTEAD, Sf		
Æthelred, Long Cross, Stamford	No (100)	
Wells 96, <i>BNJ</i> xxiv (1941-4), 86		
VII. The Five Boroughs		
BULLINGTON, Li		
Cnut, Helmet, Lincoln	(Yes)	
Cnut, Short Cross, Lincoln	(Yes)	
<i>Med. Arch.</i> xvii (1973), 181. Excav. at Goltho Manor House, near Wragby. For the first coin, inf. M. M. Archibald		
DONINGTON, Li		
William, Profile/Cross and Trefoils, Canterbury, cut half	No (195)	
Found near the village. <i>Lincs. Hist. and Arch.</i> xv (1980), 91		
FISKERTON, Li		
Edward, Trefoil-Quadrilateral, Lincoln	(Yes)	
<i>Lincs. Hist. and Arch.</i> i (1966), 39; <i>SCBI Lincs.</i> 620. Short Ferry Bridge		
GARTHORPE, Le (SK 831 207)		
Edward, Sovereign, Lincoln	Yes (60)	
Inf. R. A. Rutland, Leics. Mus.		
Goltho, see Bullington		
HORNCASTLE, Li		
Æthelred, First Hand, Lincoln, cut half	(Yes)	
Æthelred, Long Cross, Rochester	No (205)	
These two coins were found on separate sites. H. R. Mossop, <i>NCirc</i> lxxxiv (1976), 365		
LEICESTER		
Æthelred, Second Hand, mint?	(?)	
Excav. Inf. J. Mellor. (Cf. Thurstaston.)		
LINCOLN		
Æthelred, Long Cross, Lincoln (Dreng)	(Yes)	
Cnut, Quatrefoil, Lincoln	(Yes)	
William, Paxs, Exeter	No (340)	
William, Paxs, London	No (200)	
Willson MSS, Soc. of Antiquaries, inf. A. J. H. Gunstone. The Cnut found 1802 or earlier 'near the lock'; the Exeter coin is problematic, found 1819; the London coin found 1819 near the bishop's palace		
Edward, Paxs, Lincoln	(Yes)	
<i>BNJ</i> xliii (1973), 168. River Witham, 1787		
Æthelred, First Hand, Lincoln, cut farthing	(Yes)	
<i>SCBI Lincs</i> 1951. St. Paul, 1978. Note		

that another cut farthing has also been found by the Trust at Lincoln		Olaf Kyrre, Norwegian coin	(—)
Æthelred, Crux, Lincoln, cut farthing	(Yes)	Ibid. 1973. Usher Gallery grounds	
Ibid. 1952		William, Two Sceptres, Wallingford, cut half	No (185)
Æthelred, Crux, Stamford	No (65)	Ibid. 1963. Flaxengate	
Ibid. 1953		LONG SUTTON, Li	
Æthelred, Long Cross, Lincoln (Ælfsige)	(Yes)	Æthelred, Crux, Lincoln	No (60)
Ibid. 1954. St. Paul		The provenance is unconfirmed, but the reference is from Mossop's private catalogue	
Æthelred, Last Small Cross, Lincoln (Wulfric)	(Yes)	NORMANBY BY STOW, Li	
The provenance has been suspected because the coin is pecked; but it was sold to Hill by Seaby in 1931, with a note to the effect that the vendor had stated that it had been found by a workman as he was walking through Bailgate in 1891, and he bought it. Inf. A. J. H. Gunstone		Cnut, Short Cross, Lincoln	(Yes)
Cnut, Short Cross, York	No (90)	<i>SCBI Lincs.</i> 497	
Ibid. 1737. Eastgate		NOTTINGHAMSHIRE	
Cnut, Short Cross, Hereford	No (200)	Æthelred, First Hand, Torksey	No (50)
Ibid. 1955. Flaxengate		<i>BMC</i> 335; <i>BNJ</i> xxviii (1955), 51	
Cnut, Short Cross, Lincoln	(Yes)	STOKE ROCHFORD, Li	
Ibid. 1956. Flaxengate		Edward, Helmet, London	No (140)
Harthacnut, Arm and Sceptre, Lincoln, cut half	(Yes)	<i>SCBI Lincs</i> 1749 (hoard?—found with another coin)	
Ibid. 1965a. St. Paul's		THURCASTON, Le	
Harthacnut, Danish coin	(—)	Æthelred, Second Hand, London	No (150)
Ibid. 1966. West Parade		<i>SCBI Midlands</i> 191. (Cf. Leicester)	
Edward, Pacx, EO or RO = Rochester?, cut half	No (200?)	WELLINGORE, Li	
Ibid. 1957. Flaxengate		Edward, Radiate, London	No (180)
Edward, Small Flan, Lincoln	(Yes)	Found in the fields east of the village. Gunstone, in <i>Lincs. Hist. and Arch.</i> xv (1980), 91	
Ibid. 1958. Danes Terrace		VIII. Western Mints	
Edward, Expanding Cross, Stamford	No (50)	BRISTOL, Gl (Avon)	
Ibid. 1420. Usher Gallery grounds		Harold II, Bristol	(Yes)
Edward, Sovereign, mint?, cut half or fragment	(?)	<i>Med. Arch.</i> viii (1964), 264; <i>SCBI Bristol</i> 38a	
Ibid. 1959. Flaxengate		Bristol, <i>see also</i> Westbury-on-Trym	
Edward, Hammer Cross, mint?, fragment	(?)	CIRENCESTER, Gl	
Ibid. 1960. Flaxengate		William, Profile/Cross and Trefoils, Wareham	No (115)
Edward, Facing Bust, Lincoln, fragment	(Yes)	<i>SCBI West Country</i> 770	
Ibid. 1961. Flaxengate		COLESBOURNE, Gl	
Edward, Facing Bust, Lincoln, fragment	(Yes)	Cnut, Helmet, Winchester	No (95)
Ibid. 1962. Flaxengate		<i>Trans. Bristol and Glos. Arch. Soc.</i> lxxxviii (1959), 92-5; <i>SCBI West Country</i> 630	
		GLOUCESTER	
		Æthelred, Helmet, Gloucester	(Yes)
		<i>SCBI Glos.</i> 42	

HEREFORD

Cnut, Short Cross, Chester No (130)

Excav. P. Rahtz, *Current Arch.* i (1968), 242-6. Identification by M. M. Archibald, 1968

William, Two Stars, mint?, cut farthing? (?)

Jl Arch. and Hist. Soc. Chesh. 1908, 15

MUCH MARCLE, He (He and Wo) Æthelred, First Small Cross, Lincoln No (190)

Hereford City Mus. Inf. A. J. H. Gunstone

MEOLS, Chs (Merseyside)

Eadgar, Reform type, York, cut half No (150)

Dolley, *Trans. Hist. Soc. Lancs. and Chesh.* cxiii (1961), 197-201, no. 6

Æthelred, First Hand, Canterbury No (380)

Ibid. 7

NAILSWORTH, Gl

Æthelred, Long Cross, Gloucester (Yes)

SCBI West Country 526

Æthelred, First Hand, Chester?, fragment (Yes)

Ibid. 8

PAINSWICK, Gl

Æthelred, Crux, Chester No (155)

SCBI West Country 464

Æthelred, Crux, London No (295)

Ibid. 9

STAFFORD

Æthelred, Crux, London, cut farthing No (195)

SCBI Midlands 199. Excav. St. Bertelin's Chapel

Æthelred, Long Cross?, York No (150)

Ibid., under 9

Cnut, Quatrefoil, Chester (Yes)

Ibid. 10

Edward, Sovereign, London No (195)

Excav. c.1972. Stafford Mus.

Cnut, Quatrefoil, Chester, fragment (Yes)

Ibid. 11

STOW-ON-THE-WOLD, Gl (district)

Eadgar, Reform, Shrewsbury No (120)

Cnut, Helmet, Chester (Yes)

Ibid. 12

SCBI West Country 430; *Trans. Bristol and Glos. Arch. Soc.* lxxxiii (1964), 18. Provenance conjectural

Cnut, Short Cross, Chester (Yes)

Ibid. 13

STRATFORD-ON-AVON, Wa (near)

Harthacnut, Arm and Sceptre, Stamford No (90)

Cnut, Short Cross, Shrewsbury No (80)

Ibid. 14

SCBI Lincs 1377. Provenance uncertain

Cnut, Short Cross, Winchester No (280)

Ibid. 15

TAMWORTH, St

Edward Martyr, Torksey, cut half No (105)

SCBI Midlands 180

Harthacnut, Arm and Sceptre, Chester, cut half (Yes)

Ibid. 16

WARWICK

Cnut, Quatrefoil, Shaftesbury No (145)

Edward, Pacx, London, cut half No (295)

Ibid. 17

Current Arch. ix (1968), 242-6; *SCBI Midlands* 315

Edward, Small Flan, Southwark No (295)

Ibid. 18

WESTBURY-ON-TRYM, Gl (Avon)

Edward, Facing Bust, Hastings? No (240?)

Edward, Sovereign, Chester (Yes)

Ibid. 19

SCBI South-west 730

Hiberno-Norse coin? (—)

Ibid.

WORCESTER

Æthelred, First Hand, Lincoln, cut half No (160)

SCBI Midlands 187. Castle Hill

William, Bonnet, mint?, fragment (?)

Trans. Hist. Soc. Lancs. and Chesh. ns x (1869-70), 276

Cnut, Short Cross, London No (165)

Cnut, Short Cross, Worcester (Yes)

SCBI Midlands 344, 347

William, Two Stars, mint?, cut half (?)

Trans. Hist. Soc. Lancs. and Chesh. 3 iii (1874-5), 97

Edward, Expanding Cross, Warwick, gold penny	No (40)	William, Profile/Cross Fleury, York	(Yes)
<i>Brit. Mus. Quar. xviii/i</i> (1952), 10 f.		Pirie, no. 25	
IX. York and the North		William, Bonnet, London	No (275)
CATTERTON, Y		<i>NC⁴ xi</i> (1911), 286	
Edward, Helmet, York	(Yes)	William, Two Stars, York	(Yes)
<i>Yorks. Arch. JI</i> 1970, 387-95; <i>SCBI Yorks</i> , xlii		Pirie, no. 18	
CAWOOD, Y		Æthelred, First Small Cross, York	(Yes)
Edward, Pyramids, York	(Yes)	Coppergate, 1977. (Moneyer, Styr)	
Found 1980? In private possession. Inf. York Arch. Trust and E. J. E. Pirie		Æthelred, First Hand, York	(Yes)
DRINGHOUSES, Y		Coppergate, 1977. (Outhgrim)	
Æthelred, Crux, London	No (280)	Æthelred, First Hand, York	(Yes)
<i>SCBI Yorks</i> 1028. Found in churchyard		Coppergate, 1980. (Fastolf)	
HESLINGTON, Y		Cnut, Short Cross, York	(Yes)
William, type?, York	(Yes)	Coppergate, 1979. (Thurgrim)	
Pirie, p. xxxix, no. 17		Harold I, Fleur-de-lis, York?, large fragment	(Yes?)
HUNMANBY, Y		Bishopill II. 1973. (Uccde?)	
Edward, Expanding Cross, York	Yes (55)	Edward, Facing Bust, York?	(Yes?)
<i>Trans. Scarboro. Arch. and Hist. Soc.</i> iii/19 (1976), 34-5		Bishopill I, 1974. (Outhgrim?)	
JARROW, Du (Tyne and Wear)		Edward, Facing Bust, York	(Yes)
Edward, Hammer Cross, Hereford	No (340)	Clementhorpe, 1976. (Outholf.) These seven coins from the York Arch. Trust Excavations, 1972-80. Inf. The Trust and E. J. E. Pirie	
Inf. E. J. E. Pirie		X. Wales	
YORK		CAER GYBI	
'Several of Edward the Confessor, Harold, Cnut, etc.' dredged from the River Ouse c.1740	(?)	Edward Martyr, Northampton	No (290)
<i>NC⁶ xviii</i> (1958), 94-5		D. W. Dykes, <i>Anglo-Saxon Coins in the National Museum of Wales</i> 28, no. 6	
Cnut, Quatrefoil, York	(Yes)	CAERNARFON (Gwynedd)	
Pirie, <i>SCBI Yorks</i> xxix, nos. 14 and M. 17		Cnut, Quatrefoil, Chester	Yes (80)
Harthacnut, Arm and Sceptre, London, cut half	No (275)	Dykes 8	
Pirie, nos. 15 and M. 119		CAERWENT (Gwent)	
Edward, Trefoil-Quadrilateral, York	(Yes)	Æthelred, Crux, Lincoln	No (230)
Pirie, no. 16		Harthacnut, Arm and Sceptre, Chester	No (180)
Edward, Sovereign, Exeter	No (390)	Dykes 7, 9	
Edward, Sovereign, York	(Yes)	RHUDDLAN (Clwyd)	
Pirie, nos. 15 and M. 120, M. 40		Edward, Sovereign, mint?	(?)
William, Profile/Cross Fleury, Derby	No (115)	Dykes 10	
William, Profile/Cross Fleury, Huntingdon	No (185)	ST. DAVID'S (Dyfed)	
		Harold II, Hereford	Yes (175)
		Dykes 11	

INDEX OF SINGLE FINDS, BY TYPES

1. *Reform/First Small Cross* Caer Gybi, Castle Acre, Lewes, Meols (1 + $\frac{1}{2}$), Much Marcle, Old Sarum, Stow-on-the-Wold, Tamworth ($\frac{1}{2}$), Worthing?, York (2)
- 2a. *First Hand* Benson, Castle Rising, Horncastle ($\frac{1}{2}$), Lincoln ($\frac{1}{4}$ + $\frac{1}{4}$), Meols (2), Netherton, Nottinghamshire, Oxford, Wallingford ($\frac{1}{2}$), Worcester ($\frac{1}{2}$), York (4)
- 2b. *Second Hand* Carisbrooke, Chichester, Ilchester, Leicester, Old Erringham, Thurstaston
2. *Hand* Richborough
3. *Crux* Caerwent, Cambridge, Cheddar ($\frac{1}{2}$), Dringhouses, Ipswich, Lincoln (1 + $\frac{1}{4}$), Little Wittenham, London, Long Sutton, Maldon ($\frac{1}{2}$), Meols, Painswick, Stafford ($\frac{1}{4}$), Thetford (2 + $\frac{1}{4}$), Tilshead, Winchester ($\frac{1}{2}$)
4. *Long Cross* Cheddar, Compton ($\frac{1}{2}$), Horncastle, Kingston, Lincoln (2), Meols, Mildenhall, Nailsworth, Newchurch, North Curry, Old Erringham, Stonehenge, Sulgrave, Whepstead, Winchester
5. *Helmet* Bovingdon, Ewell, Exeter, Gloucester, Hellingly (^a)
Agnus Dei London?
6. *Last Small Cross* Lincoln (?), London (2), Lydford (Much Hadham), Peterborough, Silbury ($\frac{1}{4}$), (Winchester)
- 1-6. *Æthelred* Aldbourne, Aston Upthorpe, Brightwell, Harpenden, Hetherington, Southampton
7. *Quatrefoil* Baverstock, Caernarfon, Eynsham, Lincoln, Meols (2), Netherton, Thetford, Warwick, Winchester, York
8. *Helmet* Bullington, Cerne Abbas, Colesbourne, London, Meols, Ramsey, Stowmarket, Wellingborough (2?), Winchester
9. *Short Cross* Abingdon, Bullington, Cheddar, Dover ($\frac{1}{2}$), Hereford, Lincoln (3), London (3), Meols (3), Normanby, Osmington, Richborough, Rolvenden, Wallingford ($\frac{1}{4}$), Worcester (2), York
- 7-9. *Cnut* Dorchester, York
10. *Jewel Cross* Canterbury, Plymouth, Thetford (2), Winchester (2)
11. *Fleur-de-lis* Bury St. Edmunds, Sotwell, Southwick, Winchester, York
- 10 or 11. *Harold* Lewes, Peterborough, York
12. *Arm and Sceptre* Caerwent, Lincoln ($\frac{1}{2}$), Meols ($\frac{1}{2}$), St. Neots, Stratford-on-Avon, York ($\frac{1}{2}$)
- 10 or 12. *Harthacnut* Dover, Suffolk
13. *Pax* Huntspill, Lincoln (1 + $\frac{1}{2}$), Meols ($\frac{1}{2}$), Oxford
14. *Radiate* Chichester, Guildford ($\frac{1}{2}$), Ixworth, Wellingore
15. *Trefoil-Quadrilateral* Fiskerton, Ipswich, Northampton, Salisbury, York
16. *Small Flan* Lincoln, London, Meols, Welwyn
17. *Expanding Cross* Hunmanby, Lincoln, Winchester, Worcester (^a)
18. *Helmet* Bishops Waltham, Catterton, Ixworth (2), Meon Hill, Stoke Rochford, Winchester, Worthing
19. *Sovereign* Castle Acre, Cholsey, Garthorpe, Lincoln ($\frac{1}{2}$?), Meols, Rhuddlan, Stafford, York (2)
20. *Hammer Cross* Great Yarmouth, Hastings, Jarrow, Lewes, Lincoln, Wallingford?
21. *Facing Bust* Canterbury ($\frac{1}{2}$), Castle Acre ($\frac{1}{2}$), Idmiston, Kimpton, Lincoln (2), Westbury-on-Trym, York (2)
22. *Pyramids* Cawood, Winchester
- 13-22. *Edward* Brightwell, Crowmarsh Gifford, Glastonbury, Great Shelford, Moreton, Oxford, Peterborough, Union?, Warborough, Welford, York
23. *Pax* Axford, Bristol, St. Davids
24. *Profile/Cross Fleury* Benson, Foxcote, Norwich, York (3)
25. *Bonnet* Chichester, Longworth, Meols, Norwich, Oundle, York
26. *Canopy* Winchester
27. *Two Sceptres* Lincoln ($\frac{1}{2}$), Meols, Norwich
28. *Two Stars* Hadstock, Meols ($\frac{1}{2}$ + ? $\frac{1}{4}$), Saltford, Woodeaton, York
29. *Sword* Old Sarum, Winchester (1 + $\frac{1}{2}$)
30. *Profile/Cross and Trefoils* Cirencester, Donington ($\frac{1}{2}$), Middleton Stoney, Southampton, Winchester ($\frac{1}{2}$)
31. *Paxs* Bexley, Lincoln (2), London ($\frac{1}{2}$), Oxford, Wallingford
- 24-31. *William* Cadley, Rays?, Dunwich (1 + $\frac{1}{4}$), Heslington, Norwich

APPENDIX II

THE PROVENANCES OF THE RUSHER DAVIES COINS

The coin collection and numismatic library of W. Rusher Davies, of Overthorpe House, Wallingford, auctioned by Messrs. Sotheby on 24 February 1893, included forty-five Ancient British coins, several with recorded provenances, and twenty-eight post-reform Anglo-Saxon pence, of which an unusually high proportion had local provenances. So many of them (fifteen) are provenanced that doubt has been expressed (in view of the relative scarcity nowadays of stray finds) whether Mr Davies may not have been supplied with coins by persons who gave spurious provenances to pieces which they hoped to sell to him. This suspicion was reinforced by the presence of two St. Edmund Memorial pennies said to have been found at Cholsey and L(ong) Wittenham respectively—on the Wallingford side of the Thames and therefore, as Rigold pointed out [*BNJ* xxix (1958-9), 189], in English territory. They seemed to be too far from base. The high proportion of St. Edmund coins in the recent Northampton excavations and in earlier finds from Northampton should, however, make one hesitate to dismiss these particular provenances out of hand. The type was represented also in the Reading find of 1839.

In his later years Rusher Davies corresponded with Sir John Evans, who encouraged him to report local finds, particularly in the Ancient British series. A bundle of letters written to Evans is preserved in the archives of the Heberden Coin Room. From these a picture of the man emerges clearly. His interest in coins was evidently well known in the neighbourhood, and he seems to have been willing to buy more or less any kind of coins that were ordinarily brought to him. Thus in 1891 he writes, 'I do not trouble you so very often, but knowing you like to hear of fresh finds, I again send you a list of some from the near neighbourhood since I last sent to you. Altogether I have met with about 108 coins but mostly small early English silver [sterlings, cf. groats] or Copper Roman non of any rarity.' In the next year we catch a glimpse of him at home: 'I fancy I have met with something extra interesting. A lad called last night and said he had got two old Romaners as they call them about here for Roman coins I did not notice them as it was dark I gave him some thing for them . . . the other . . . to my astonishment . . . Cunobelin . . .' In another letter, 'Yesterday a man brot me in a small silver coin which he found in the road near here and which has evidently been much trod on.' Or again, 'I shall feel much pleasure in forwarding the Irish penny in the course of a few days together with an account of where found, etc. I also possess a penny of Henry 1st found on same property 3 years ago which I think is an unique type of mintage tis cracked but in fine state . . . Godric on Sher . . . I also have a penny of which the like portrait I have not yet seen which I will send with the others it was found also here in Wallingford. . . .' Or once more, 'I had a fine 20/- of Chas I brot me. It was ploughed up near Bensington not far from this town.'

Of course one cannot rule out the possibility that Davies was sometimes deceived; but the current price of Anglo-Saxon coins was modest: the lot of thirteen specimens of Edward the Confessor in the Davies sale fetched £2. 17s. And life in Wallingford in the 1880s was 'far from the madding crowd'. Davies writes to Evans of what happens 'hereabouts', or refers to the location of a village as though Evans could not be expected to know such things.

The find-spots of the late Saxon coins are mostly within a very few miles of Wallingford. There are three places that I have been unable to trace, namely Hetherington, Rays, and Union. The Henry I penny is stated in the sale catalogue to have been found at St. John's. This very probably refers to the manor of Sotwell St. John, on the northern outskirts of Wallingford.

All told, it would be draconian to reject the Rusher Davies provenances *en bloc*, even though one cannot feel altogether sure that every one of them is authentic. The weakness of the case remains that Davies was able to acquire so many coins ostensibly found locally. But there are hundreds of unpecked coins in public and private collections today with no provenances attaching to them, and one should not doubt that numerous single finds have gone unrecorded (see the note on London, above). Throughout the nineteenth century hardly anyone other than Sir John Evans showed an active interest in single finds of late Saxon coins, and sale-catalogues very rarely record provenances.

One of the Rusher Davies finds can now be identified in the Goodacre collection. The whereabouts of the rest are unknown.

APPENDIX III

Mints taking a one per cent or greater share, ranked according to output. In each type a rule is placed beneath the mint with which 50 per cent is reached.

	1	2a	2b	3	4	5	6
1	Winchester	London	London	London	London	London	London
2	York	Winchester	Exeter	York	Lincoln	York	Lincoln
3	Stamford	York	Canterbury	Southwark	York	Lincoln	Winchester
4	London	Exeter	Winchester	Winchester	Winchester	<u>Winchester</u>	<u>York</u>
5	Canterbury	<u>Canterbury</u>	Rochester	Lincoln	<u>Chester</u>	Thetford	Stamford
6	Lincoln	Lincoln	Norwich	Exeter	Exeter	Exeter	Thetford
7	<u>Lymne</u>	Stamford	Thetford	Canterbury	Canterbury	Chester	Exeter
8	Chester	Thetford	Ilchester	Thetford	Stamford	Stamford	Norwich
9	Exeter	Derby	Stamford	Colchester	Thetford	Cambridge	Chester
10	Norwich	Norwich	Totnes	Cambridge	Norwich	Norwich	Canterbury
11	Leicester	Lewes	Barnstaple	Wallingford	Oxford	Canterbury	Lewes
12	Northampton	Chester	Bridport	Hertford	Northampton	Oxford	Lydford
13	Oxford	Totnes	Shaftesbury	Ilchester	Bath	Huntingdon	Cambridge
14	Wilton	Ipswich	Chester	Norwich	Huntingdon	Bath	Dover
15	Lewes	Southampton	Chichester	Wilton	Lewes	Dover	Ipswich
16	Bedford	Barnstaple	Ipswich	Oxford	Cambridge	Lewes	Salisbury
17	Ipswich	Ilchester	Leicester	Northampton	Wallingford	Shaftesbury	
18	Rochester	Leicester	Lymne	Rochester	Hereford	Hastings	
19	Shrewsbury	Rochester	Tamworth	Maldon	Shrewsbury	Ipswich	
20		Shaftesbury	Wallingford	Lewes	Wilton		
21		Hereford	Wareham	Stamford	Colchester		
22		Huntingdon		Totnes	Gloucester		
23		Wilton		Barnstaple	Dover		
24		Shrewsbury		Wareham			

	7	8	9	10	11	12	13
1	London	London	London	London	London	London	London
2	York	York	Lincoln	Lincoln	Lincoln	Lincoln	Lincoln
3	Lincoln	<u>Lincoln</u>	<u>York</u>	York	York	York	<u>York</u>
4	Winchester	Winchester	Stamford	<u>Stamford</u>	Stamford	Stamford	Winchester
5	<u>Chester</u>	Stamford	Winchester	<u>Winchester</u>	<u>Winchester</u>	Winchester	Stamford
6	Cambridge	Chester	Dover	Thetford	<u>Thetford</u>	<u>Thetford</u>	Thetford
7	Thetford	Thetford	Canterbury	Chester	Chester	Norwich	Norwich
8	Norwich	Canterbury	Thetford	Norwich	Norwich	Exeter	Chester
9	Stamford	Exeter	Chester	Canterbury	Oxford	Gloucester	Hertford
10	Ilchester	Dover	Norwich	Dover	Bristol	Bristol	Canterbury
11	Southwark	Norwich	Exeter	Oxford	Wallingford	Cambridge	Oxford
12	Oxford	Oxford	Oxford	Exeter	Canterbury	Oxford	Hereford
13	Exeter	Huntingdon	Hastings	Hereford	Salisbury	Wallingford	Northampton
14	Bristol	Salisbury	Salisbury	Bristol	Northampton	Chester	Nottingham
15	Ipswich	Gloucester		Derby	Derby	Lewes	
16	Shrewsbury	Hastings		Salisbury	Exeter	Hereford	
17	Gloucester	Southwark		Shrewsbury	Hertford	Shrewsbury	
18	Canterbury	Bath		Southwark	Leicester	Southwark	
19	Colchester				Dover	Canterbury	
20	Hertford					Gloucester	Derby
21	Northampton					Hereford	Dover
22	Lewes				Cambridge	Leicester	
23						Salisbury	

KING STEPHEN AND THE INTERDICT OF 1148

PETER SEABY

THE reign of King Stephen provides the most varied and problematical coinages of all the Norman kings. In a series of three papers the writer proposes to discuss some of the problems concerning the chronology, typology, and geographic distribution of the coins of this reign.

Stephen's substantive issues comprise the first and last coinages of the reign issued at mints throughout the country, and two intermediate types which were produced during the civil war at mints situated principally in the eastern part of the country. For the purpose of this paper it is proposed to describe these types as the Cross Moline, Cross Pattée (actually voided cross pattée), Cross Fleury, and Cross Pommée (double cross) coinages, and it may be useful to provide a concordance with other references:

	<i>BMC</i>	<i>Hawkins</i>	<i>North</i>	<i>Seaby (1981)</i>	<i>Hoard names</i>
Cross Moline	I	270	873	1278	'Watford'
Cross Pattée	II	269	878	1280	
Cross Fleury	VI	—	879	1281	
Cross Pommée	VII	268	881	1282	'Awbridge'

The types numbered *BMC* III, IV, and V by Brooke are now considered to be merely local types as they are issued by very few mints.

Commander Mack, in his 1966 survey of the coinage,¹ followed the then generally accepted view that the Cross Moline issue continued to be struck until shortly after the king's release from captivity in November 1141. He did express some uncertainty regarding the duration of the Cross Pattée and Cross Fleury types and whether the latter followed the former or whether they were issued concurrently. However, Michael Dolley, in publishing the Norman coins in the Uppsala University collection,² tentatively suggested that a date in the late 1040s might be more appropriate for the commencement of the Cross Pattée type and that the Cross Fleury issue might be 'a relatively ephemeral transitional coinage' bridging a year or two at the most between the Cross Pattée and the Cross Pommée issues. In a recent issue of the *Journal*³ Robert Seaman has formulated a more specific chronology for the obverse die variants of the substantive Cross Moline type and its succeeding issues, based on a consideration of the composition of the Watford, South Kyme, Sheldon, Nottingham, and Linton hoards, the coins of Matilda and the earliest issue of Henry of Anjou:

Cross Moline issue:	STIFNE REX (etc.)	Dec. 1135–c. 1141
	STIEFNE RE	c. 1141–c. 1145
	STIEFNE R	c. 1145–c. 1147
	STIEFNE	c. 1147–c. 1149/50
Cross Pattée issue		c. 1150–c. 1152
Cross Fleury issue		c. 1153
Cross Pommée issue		c. 1153–c. 1158

¹ R. P. Mack, 'Stephen and the Anarchy 1135–1154', *BNJ* xxxv (1966), 38–112.

Uppsala University Cabinet', *BNJ* xxxvii (1968), 29–34.

² M. Dolley, 'The Anglo-Norman Coins in the

³ R. J. Seaman, 'A Re-examination of Some Hoards Containing Coins of Stephen', *BNJ* xlvi (1978), 58–72.

This proposition, that the first issue of the reign continued for a period of some fourteen years and that the three succeeding issues were condensed into the last five years of the reign, the final issue continuing for some years into the reign of Henry II, implies a major break with the earlier practice of frequent and presumably regular changes of type. Under William I and II there had been thirteen changes of type over a period of 33½ years and during the 35½ years of Henry I there were fifteen changes of type. Stephen had certainly taken over a bulging treasury on securing the crown and it seems that he was content to institute a *type immobilisée* during the greater part of his reign, a course of action which would have received the approval of commercial interests in the city of London and other urban centres. His inability ultimately to replenish his resources due to the disruption of the civil administration over large areas of the country and his need to rely on military forces recruited from the continent may have been factors which prompted Stephen to reintroduce changes in coin types at the close of the 1140s or shortly after.

Further evidence to confirm or revise the proposed new dating would obviously be desirable, and it is the writer's view that a reconsideration of Stephen's coins struck from defaced dies may provide a fixed point in the later 1140s which would go some way to support the new chronology. Mack describes these coins as being from 'erased' dies, but it may be preferable to use the term 'defaced' as the designs were not wholly erased. It will be argued that a consideration of the particular form of defacement and of the mints from which the defaced coins were issued is essential to an understanding of this unusual phenomenon. It was only the obverse dies that were defaced and, with one exception, only selected parts of the dies were damaged. It is only one Bristol die (Mack no. 136) which is defaced with what appears to be indiscriminate marks cut in various directions across the surface.

There are two coins from the Nottingham hoard⁴ which have been described as having been struck from defaced dies that may not belong to the main series. A Hastings penny of the moneyer Sawine (Danson 148, Mack 155) has a curved line passing through the king's chin and a vertical line downwards, and this may only be the result of accidental damage. Another coin of the uncertain mint 'Delca' (Danson 149, given as 'Derby?') has a horizontal line to the right of the king's sceptre which could be either accidental or a somewhat half-hearted attempt at defacement.⁵ This leaves a main body of defaced pieces which can be divided into East Anglian, Lincolnshire, Nottingham, and York groups.

THE COINS

The East Anglian Group

The East Anglian group is by far the most extensive with coins known of four mints: Norwich, Thetford, Bury St. Edmunds or possibly Eye, and an uncertain mint, probably Castle Rising. The main defacement is a long cross which extends across the king's head to the edges of the coin, Fig. 1. On some of the Norwich coins there are smaller subsidiary crosses stamped into the fourth quarter of the cross, Fig. 3, or into the second and fourth quarters of the cross, Fig. 2, possibly with the intention of

⁴ E. W. Danson, 'The Nottingham Find of 1880: a Stephen Hoard Re-examined', *BNJ* xxxvii (1968), 43-64.

⁵ Three 'Delca' coins of the moneyer Willem, probably

from the same reverse die, were found in the Prestwich hoard (*Coin Hoards*, i (1975), 92, pl. 20, 4).

defacing the head and shaft of the king's sceptre (e.g. Mack 145). Defaced coins are now recorded for seven of the ten or more Norwich moneyers who are known to have been active during the later years of the Cross Moline coinage, i.e. Adam, Alfwald, Edstan, Eustace, Iun, Oter, and Walter. All these coins have the obverse inscription STIEFNE R or STIEFNE. This heavy concentration of moneyers issuing defaced coins at one mint would seem to suggest that Norwich may well have been the centre from which the defacement of the coinage was organized.



1



2



3

Thetford is represented by one moneyer, Baldwin (Mack 142). The Bury St. Edmunds coin listed in the summary of the Prestwich find in *Coin Hoards*⁶ is of the moneyer Gilebert, a known Bury moneyer, but the form of the mint name 'ei' might equally well indicate Eye, a Domesday borough (*Eia*) just south of the Suffolk/Norfolk border and the centre of Stephen's principal demesne estates known as the 'honor of Eye'. Another defaced coin from the Sheldon find (Mack 143) is by the moneyer Robert, and unfortunately it has an illegible mint-signature, but it may be significant that the only East Anglian mint at which a Robert is known to have been active is Castle Rising near King's Lynn, a mint that was only in operation during the reign of Stephen.

Some of the East Anglian defaced dies have the large cross somewhat crudely cut across the dies but others appear to have the cross carefully punched into the die to terminate at the outer circle.

The Lincolnshire Group



4



5



6

Lincoln pennies of the moneyer Gladwine occur with a bar stamped across the shaft of the king's sceptre (Mack 150a and 150c), Fig. 4. A coin from the same die struck prior to the die being altered is also known (Mack 150b). At Stamford some pennies of the moneyer Lefsi have a bar through the king's sceptre and a plain cross stamped on

⁶ Ibid., p. 92. To be published by Marion M. Archibald and F. Elmore-Jones.

the king's shoulder near the edge of the coin (Mack 151), Fig. 5. Again, coins are known from one of the obverse dies prior to alteration. Another penny (Mack 154) is described as being from an uncertain mint, '+ () BF() ANE',⁷ but this may also be a Stamford coin as the last four letters of the inscription could be read as '-TANF.'. This coin has a thick bar across the sceptre but seems to be without a cross over the king's shoulder, Fig. 6.



7

There is a further coin of an uncertain mint of the moneyer Edward (Mack 153) which conceivably could belong to this 'Lincolnshire' group as it has a thick cross on the king's shoulder and a defaced sceptre, Fig. 7. Across the shaft of the sceptre is a peculiar mark which bears some resemblance to a small conventionalized thunderbolt as it is made up of two fleured sceptre-heads placed back-to-back. If a thunderbolt was intended its symbolism may become apparent when the purpose of defacement is considered. A moneyer Edward is known at the mints of Colchester and Sudbury for the Cross Moline type, so it may be East Anglian.

The Nottingham Group

The defaced coins of the Nottingham mint are only known of the moneyer Swein who appears to have been the only moneyer working at the mint during this reign. The fact that defaced coins of Swein far outnumber those of moneyers from other mints



8



9



10

must be due to the composition of the Nottingham hoard and the relatively near-by Sheldon find. Swein's coins of the Cross Moline type can be divided into those that are undefaced (Mack 25), coins which have had the obverse inscription defaced wholly or in part by being hammered around the outer part of the coin (Mack 157a-e), Fig. 8, and those pennies which have a neat Latin cross pattée struck over the shaft of the king's sceptre (Mack 148), Fig. 9, or a Latin cross with usually a pellet in one angle struck across the king's head (Mack 149a-oo), Fig. 10. These coins with a cross usually

⁷ G. C. Brooke, *BMC Norman Kings*, p. lxxviii, no. 231, where it is tentatively attributed to 'Canterbury'.

have hammered-out inscriptions. The very irregular Mack 149*qq* does not seem to be part of the same series.⁸

The hammering of the inscription appears to have been carried out as a separate process from the defacement of the dies with a cross as each coin seems to have had individual treatment. It must have been quite a laborious operation.

The York Group



11

Only two coins are known, both of which have the obverse defaced by two parallel lines cut across the die from edge to edge. The type was originally only recorded from the coin of the moneyer Martin of York in the University of Leeds collection (*SCBI* 793; Mack 156) which Brooke suspected was a forgery,⁹ probably because it had a left-facing bust of irregular style and rather crude lettering, Fig. 11. The inscriptions are only partly legible and this may be due to some flattening through hammering. However, another coin with a right-facing bust, similarly defaced though with the lines running almost diagonally, has more recently come to light in the Prestwich hoard. The moneyer is Willem, but the mint name is not certain though clearly it is not York.

The Bristol Group



12

As mentioned above, the defaced Bristol coins (Mack 136) are all from one obverse die of the moneyer Gurdan which is marked with lines cut in various directions in a seemingly indiscriminate manner, Fig. 12. This is an obverse with the inscription *STIEFNE* which Seaman would date to *c.* 1147–1149/50, so the die in its original state may date to some time after February 1148 when the ‘Empress’ Matilda left England for the continent and the defacement could have been carried out either late in 1148 or possibly during the period of her son Henry’s 1149 expedition.

⁸ Not from the Nottingham hoard as described in the Roth (1917) Sale catalogue. See Danson, *op. cit.* p. 58.

⁹ *BMC Norman Kings*, p. lxxxi.

THE FINDS

The defaced coins occur in five hoards¹⁰—Dartford (1825), Sheldon (1867), Nottingham (1880), South Kyme (c.1922), and Prestwich (1972). They only comprise a substantial proportion of the total number of coins in the Sheldon and Nottingham finds:

<i>Hoard</i>	<i>Total no. of coins</i>	<i>Defaced coins</i>	<i>Percentage of total</i>
Nottingham ¹¹	300+(177)	c.60 (38)	20.0 (21.5)
Sheldon, Derbys.	102	17	16.6
Prestwich, Lancs.	1065	32	3.0
Dartford, Kent	63	1	1.4
South Kyme, Lincs.	344	2	0.6

The number of defaced Nottingham coins in the Nottingham and Sheldon finds has been commented on above. The importance of the East Anglian group, and defaced coins of the Norwich mint in particular, stands out in the following listing of the mints striking defaced coins in the five hoards:

*Nottingham*¹¹ Norwich 17 (11), Thetford 3 (1), Stamford 3 (3), Lincoln 2 (2), Nottingham 31 (20), Uncertain 2 (1).

Sheldon Thetford 1, Stamford 1, Nottingham 15.

Prestwich Norwich 22, Bury St. Edmunds (or Eye?) 1, Stamford 2, Nottingham 6, Uncertain (?York Group) 1.

South Kyme Norwich 1, Bristol 1.

Dartford Bristol 1.

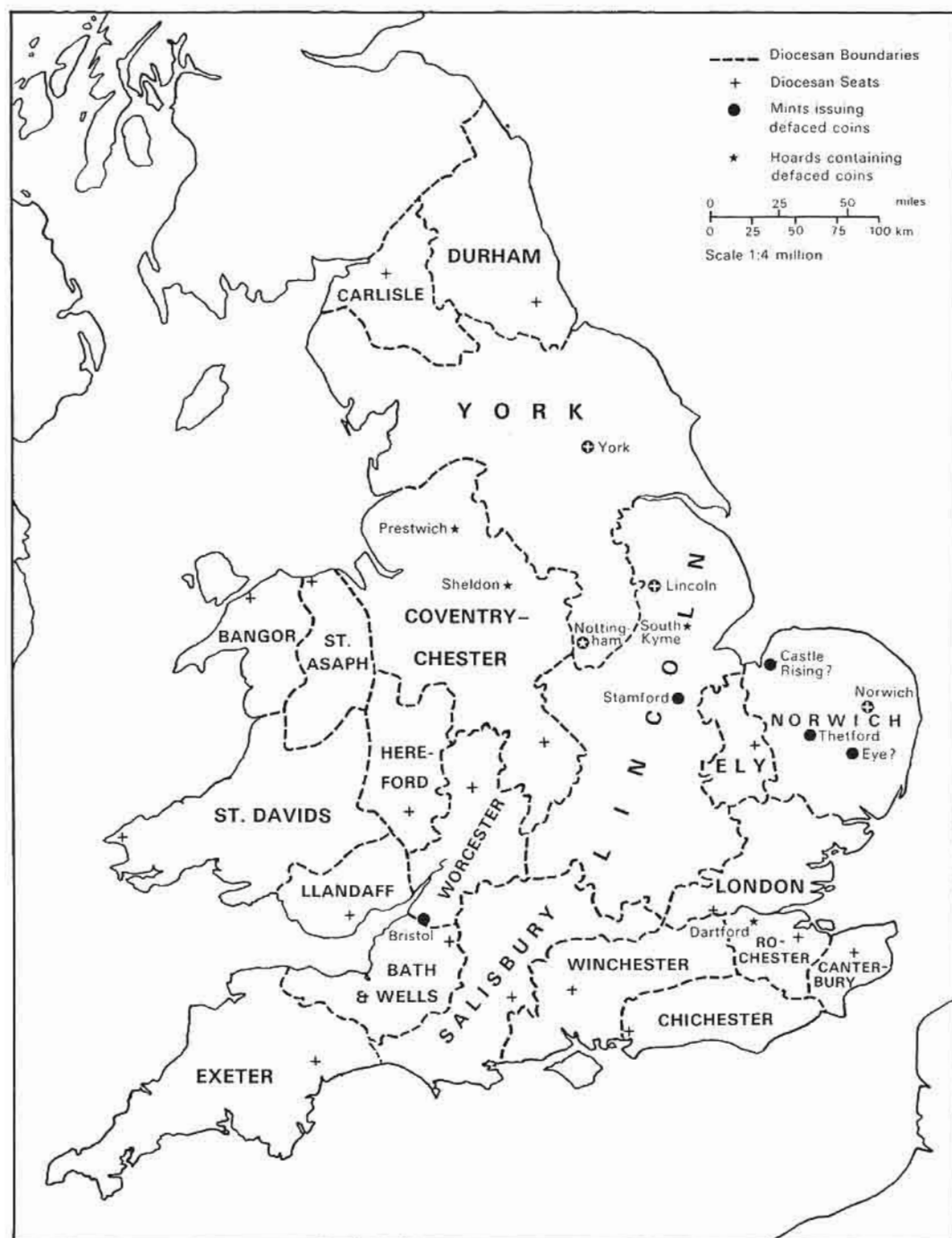
The fact that there are half as many defaced coins of Norwich as there are defaced coins of Nottingham in a Nottingham hoard and three and a half times as many in the Prestwich hoard, some sixty miles further from Norwich than is Nottingham, reinforces the proposition that Norwich appears to be the focal point for the entire series.

Dartford, the one southern hoard, contained only one defaced coin of the Bristol mint. South Kyme, with one Bristol and one Norwich defaced coin, apparently had none from Lincoln itself although normal Lincoln pence of the Cross Moline type outnumbered coins of any other mint represented in the hoard. In the Prestwich hoard, which had more pennies of Lincoln than of any other single mint, there were again no defaced coins of Lincoln. Perhaps the attempt to institute a defaced coinage at Lincoln was interrupted and the issue quickly suppressed.

As Cross Moline coins of Henry of Anjou were present in the Nottingham, South Kyme, and Prestwich hoard, and as the argument for their date being not earlier than Henry's expedition of 1149 seems a strong one, it would appear very probable that all three hoards were deposited about the time of Stephen's campaign in the north in the summer of 1149 or very shortly afterwards. The Sheldon hoard contains two variants of the Cross Pattée type and two Cross Moline/Cross Pattée mules, so it is likely to have been deposited at a slightly later date, and Seaman's proposed

¹⁰ Mack, *op. cit.*, pp. 101-7. J. D. A. Thompson, *Inventory of British Coin Hoards A.D. 600-1500* (R.N.S. Special Publications no. 1, 1956).

¹¹ The figures in parenthesis refer to the Danson listing.



Dioceses, Mints, and Hoards

dating of c.1150 appears very reasonable. The Dartford hoard, now known to have contained a specimen of Stephen's rare *BMC* type V as well as a penny of William of Gloucester's last type (Mack type 3),¹² can hardly have been deposited before 1153 at the earliest.

If the assumption that the Nottingham, South Kyme, and the Prestwich hoards were not deposited prior to mid 1149 is sustained then it would seem reasonable to assign to the defaced coinage a date of issue shortly before this, i.e. some time between c.1147 and mid 1149.

THE OCCASION AND PURPOSE OF DEFACEMENT

If the dating of the defaced coins now needs to be revised by some six to eight years it is also necessary to bring into question the purpose of the coinage. It is no longer sufficient to presume a change of allegiance by various barons or moneyers from Stephen to the Angevin cause,¹³ a theory which may not have seemed unreasonable when a dating to the period of Stephen's captivity was being mooted. The form of defacement is obviously an important consideration in arriving at an acceptable answer. The following summary excludes the Bristol coins:

Type of defacement	E. Anglian group	Lincolnshire group	Nottingham group	York group
Cross on head	×		×	
Cross on shoulder		×		
Cross(es) on sceptre	×		×	
Bar across sceptre		×		
Thunderbolt (?) across sceptre		×		
Hammered inscription			×	?
Parallel lines				×

The use of a cross as a means of defacement is such a prominent feature of the coinage that it is strange that an ecclesiastical origin has not been advocated before, particularly as the form of the Latin cross used on some of the Nottingham coins is so obviously a Christian symbol. It is necessary, then, to examine the relations between Stephen and the Church, especially for the period c.1147–1149.

Stephen had not been able to secure the throne without the co-operation of the English Church which had been obtained largely through the influence of his younger brother, Henry, bishop of Winchester, and Roger, bishop of Salisbury, who was justiciar. His coronation had been a hastily contrived affair, with Archbishop William de Corbeil only agreeing to anoint him after Hugh Bigod, King Henry's steward, had testified that on his deathbed Henry had relieved the English barons from their oath of allegiance to his daughter Matilda. In return Stephen had promised to restore and protect the privileges and liberties of the Church and, once his coronation had been recognized by Pope Innocent II, he confirmed these liberties in what has come to be called the 'Oxford Charter'.

¹² C. E. Blunt, F. Elmore-Jones, and P. H. Robinson, 'On Some Hoards of the Time of Stephen', *BNJ* xxxvii (1968), 40.

¹³ E. Hawkins, *The Silver Coins of England* (3rd edn. 1887), p. 178. W. J. Andrew, 'A Remarkable Hoard of

Silver Pennies and Halfpennies of the Reign of Stephen, Found at Sheldon, Derbyshire, in 1867', *BNJ* vii (1910), 59 ff. Brooke (*BMC* p. lxxx) was inclined to believe that the dies might have been defaced by royal authority 'when the mints were in danger of falling into enemy hands'.

Stephen's first rupture with the Church stemmed from his arrest, in 1139, of Roger of Salisbury and his nephews, the bishops of Lincoln and Ely, and the confiscation of their castles. This breach was healed but there then arose a bitter conflict between St. Bernard of Clairvaux and the Papacy on the one hand and the king's party in the English church led by Henry of Winchester. The death of Archbishop Thurstan of York in 1140 was followed by a disputed election and eventually by the consecration of William Fitz Herbert, Stephen's nephew, in 1143. However, St. Bernard was able to prevent him receiving the *pallium* and he was finally deposed by Pope Eugenius III in 1147. When Henry Murdac, abbot of Fountains, won another contested election he was consecrated by the Pope but Stephen refused to acknowledge him and forbade him to enter his diocese. When refused entry to York early in 1148 Henry Murdac placed the city under interdict and he excommunicated both the treasurer of York, who was Stephen's nephew, and William of Aumale, the earl of York. A further dispute resulted from the exile of Theobald, archbishop of Canterbury, who had attended the Council of Rheims in March 1148 in clear defiance of King Stephen's orders. The Pope threatened that the country would be placed under interdict and that the king himself would be excommunicated at Michaelmas if he did not allow Theobald to return to his diocese.

The king refused to give way and the interdict was promulgated by Theobald to take effect from 12 September 1148; conceivably Stephen's personal excommunication was imposed, as decreed, two weeks later. The majority of the English bishops, however, failed to carry out the provisions of the interdict. John of Salisbury records that 'almost all the bishops who were in the king's power were turned aside from the archbishop like a deceitful bow (*Psalms lxxviii*, 58) and the clergy preferred tranquility to obedience. For some took to flight so that no orders could be given in their absence; others offered in excuse the danger to themselves and their friends, the loss to the Church and a justifiable fear of schism breaking out.'¹⁴ The chroniclers do not record which of the bishops were *not* in the king's power nor those who did enforce the interdict, nor do they give any details of the king's excommunication. The bishops excused their failure to attend Theobald in France by their inability to leave England without the king's permission. Theobald decided, then, to return to England, but knowing that he would be refused entry to Canterbury he embarked for the Suffolk coast where he received a friendly welcome from Earl Hugh Bigod, who was one of Stephen's less loyal barons and who installed him in his great castle of Framlingham. Various bishops attended him there, amongst whom are known to have been the bishops of Norwich, London, and Chichester. Stephen realized that he must rapidly come to some arrangement with Theobald, and some time in October or November he gave in and allowed the archbishop to return to his see, though he remained obdurate on the exclusion of Henry Murdac from York. Presumably Stephen had been under threat or sentence of excommunication for a period of some four to six weeks from 29 September.

In the light of the events of 1148 the phenomenon of the defaced coinage now appears to fit neatly into place. With the exception of Bristol, which was in Angevin territory, the mints where the coins were issued were all in the dioceses of Norwich, Lincoln, and York, and from those parts of the dioceses which are known to have

¹⁴ John of Salisbury, *Historia Pontificalis*, in *English Historical Documents*, vol. ii, p. 681; see also the edition by Marjorie Chibnall, London, 1956.

been or are likely to have been outside the effective control of the king in the autumn of 1148.

In the diocese of Norwich most of Norfolk and part of Suffolk would have been under the control of the rebellious Earl Hugh Bigod who is known to have given support to Archbishop Theobald. Framlingham was within easy reach of Norwich and Bishop William and Earl Hugh would have been able to use the Norwich moneyers to set a pattern for the defacement of the coinage.

William de Roumare had been made earl of Lincoln in 1141, but he was in Normandy in the mid 1140s supporting Geoffrey of Anjou, and in 1149 Stephen created Gilbert de Gant earl of Lincoln in his place. In 1148 Earl Ranulf of Chester, the half-brother of William de Roumare, was seeking to repossess the estates in Lincolnshire inherited from his mother which had been confiscated when Stephen had arrested him in 1146, though Ranulf was not able to regain control of the city of Lincoln. The see of Lincoln had been vacant since Bishop Alexander died in February 1148. Though Stephen and Henry of Winchester had hoped to provide an episcopal seat for one of their relations, Gervase abbot of Westminster, Hugh abbot of St. Benet's Holme, or Henry de Sully abbot of Fécamp, there was papal opposition to any such candidate. The chapter of Lincoln probably wanted to avoid antagonizing the king but they wished to elect Robert de Chesney, archdeacon of Leicester. After the interdict was ended he was eventually elected in the presence of the king at Westminster on 13 December and was consecrated by Theobald six days later.¹⁵ One moneyer at the Stamford mint would have been under the control of Martin, abbot of Peterborough (1133–55), and this moneyer must have been Lefsi. A bull of Eugenius III (1145–53) confirmed to the abbey the privileges it formerly held and actually specifies a coining-die in Stamford.¹⁶ In other parts of the diocese of Lincoln Stephen's earls, Robert de Beaumont of Leicester, Simon de Senlis of Northampton and Huntingdon, and Aubrey de Vere of Oxford, would probably have brought pressure on the local clergy to prevent the interdict being enforced in their earldoms. Similarly, in other dioceses in the south and east of England the clergy would have been fearful of the king's wrath if they had attempted to put the interdict into operation.

In the province of York which included Nottinghamshire, the Church was in a state of schism which persisted until 1150. The political situation in Nottingham in 1148 is somewhat obscure. When Robert de Ferrers received the earldom of Derby after the Battle of the Standard in 1138, this also included the county of Nottinghamshire, and he is even styled *Comes de Notingeham* in two charters that must date prior to 1141.¹⁷ After 1141 he is usually styled just *Comes Robertus de Ferrarus*. At some time between 1148 and 1153 he is known to have been allied by private treaty to Ranulf, earl of Chester.¹⁸ William Peverell, sheriff of both Nottinghamshire and Derby, was Earl Robert's father-in-law. Archbishop Henry Murdac, who had been received at both Beverley and Ripon, two of the three 'sub-cathedrals' of the huge diocese of York, would certainly have tried to secure similar recognition at the third, Southwell near Nottingham, in the southern part of the diocese. It is possible that at Nottingham the moneyer Swein could have continued the production of defaced pennies for some

¹⁵ A. Saltman, *Theobald Archbishop of Canterbury* (1956), p. 107.

¹⁷ R. H. C. Davis, *King Stephen* (1967), p. 136.

¹⁸ *Ibid.*, p. 112.

¹⁶ *BMC Norman Kings*, p. clxxviii.

months after defacement had ceased in the province of Canterbury, perhaps even until Stephen moved north for his successful campaign against King David, Henry of Anjou, and Earl Ranulf in 1149. It is also possible that, with the city of York barred to him, Archbishop Murdac was able to procure the services of Swein of Nottingham to produce most of the new coin that he needed. It appears that after Stephen left York in the summer of 1149 Count Eustace found that the clergy of the city were obeying the provisions of the interdict imposed by Archbishop Murdac and he insisted that they performed the full service of the mass as usual.¹⁹

The types of defacement, in particular the cross struck over the head or shoulder of the king, must surely have symbolized the authority of the Church being imposed on a recalcitrant monarch, and it would seem to indicate that the penalty of excommunication *had* been imposed. Interdiction was a general punishment which forbade the celebration of mass throughout the area over which it was imposed. Excommunication was a sentence imposed on particular persons, and if that person was a monarch then his subjects were relieved from all oaths of fealty sworn to him. It is this aspect of the punishment which seems to be indicated by the cancellation mark on the sceptre; the sceptre symbolizing the power of sovereignty invested in the monarch, *dei gratia*, at his coronation. A defacement of the coinage could have been conceived as an ideal medium for bringing before all those handling currency a visible sign that the king was being punished and humiliated by the Church, and it would have served as a warning to his subjects that they should refrain from any association with him lest they be punished likewise.²⁰

It is probable that negotiations between Theobald and the king commenced soon after the archbishop arrived in Suffolk, for Stephen soon reached agreement with him. Very probably Stephen would have wished to call in defaced coins for reminting as soon as was practicable, and it may be that this was a further reason for the introduction of a new type of money, the Cross Pattée coinage, some time during 1149, possibly during the summer or at Michaelmas or, at the latest, early in 1150.

That the defacement of Stephen's coinage was ecclesiastical in origin seems indisputable, and if the writer is correct in assigning the operation to the period of the Interdict and perhaps to the period of Stephen's possible excommunication, i.e. 29 September–October/November 1148, this provides a firm chronological base for arriving at a more positive dating of hoards, later types, and some of the irregular issues. It also seems to be a phenomenon unique in the annals of European medieval coinage and one that illustrates the struggle of the Church in the twelfth century to stamp out simony and to liberate itself from the restrictions imposed on it by a feudal lay society. Further hoards or finds of single coins will probably add to our knowledge of the 'defaced coinage'.

¹⁹ William of Newburgh, *Historia Rerum Anglicarum*, in *Chronicles of the Reigns of Stephen, Henry II and Richmond I*, ed. Richard Howlett, Rolls Series (1884–6), p. 56.

²⁰ The writer is indebted to Professor R. H. C. Davis, University of Birmingham, for the interest he has shown in the subject discussed above. Whilst agreeing that, in the circumstances of the Interdict and the threat of excom-

munication, the coinage could well have been defaced in some areas, Professor Davis has expressed the view that there is no evidence from other sources that the sentence of excommunication actually came into force. Did Theobald expect the Pope to perform the rites of excommunication at Michaelmas, or did he order the coinage to be defaced as a final warning to the king of the serious nature of the sentence about to be promulgated?

THE QUEENHITHE HOARD OF LATE-FIFTEENTH-CENTURY FORGERIES

MARION M. ARCHIBALD

DURING the weekend of 9–10 February 1980 Mr Roger Smith, Mr Ian Smith, and Mr Paul Woods found 495 medieval pennies on the Thames north foreshore in front of the site of the now-demolished Bull Wharf warehouse adjacent to Queenhithe Dock, London. A number of strays from the find have recently appeared on the market so the original cache must have been in excess of 500 coins. No evidence of a container was noted. The finders took the coins to Mr John Clark of the London Museum who kindly allowed them to be studied and recorded in the British Museum.



When found, the coins displayed a remarkable range of colour from brown and yellow-green to spectacular shades of blue and violet, a patination typical of silver objects recovered after several centuries from the polluted waters of the Thames. This patination was superficial, however, and expert chemical cleaning by Mr K. A. Howes, Conservation Officer in the Department of Coins and Medals, revealed that few of the coins had been seriously corroded. Twelve coins were left untreated as examples of their original appearance. All the coins were currency forgeries struck from false dies on flans too small for the dies, giving the appearance of clipped coins. The majority are irregularly circular in shape and measure about 13–15 mm in diameter although almost as large a number of them are more oval. The edges of many coins show the vestiges of the corners of the original blanks which had not been totally obliterated by the striking, demonstrating that they had been cut roughly square or rectangular from sheet silver. The coins were produced from a single obverse die and four reverses, illustrated twice life-size on the accompanying plate from specimens now in the British Museum. One

reverse named London and three, York. Die-links between coins struck at different mints would have been virtually impossible in the regal coinage of this period. The dies had been prepared in the official manner from a series of punches for the details of the effigy and for the individual letters. The latter are debased in form, ill-matched for size, and several are clearly broken. There are basically two letter founts, one larger than the other. The E and O of the larger fount are always broken, R serves for B, and C for both D and L. While the forger could have resorted to this duplication merely to save the extra time and labour required to produce a fuller range of letter-punches, the presence of the broken letters suggests that this group of motley punches had not been newly made for the present purpose but had been derived from other founts some of whose punches had been damaged, lost, or used to destruction in producing dies for earlier false coins or, as in the case of the official coinage-punches, for jettons and other non-numismatic objects. Other forgeries from the same workshop as the Queenhithe coins are therefore a distinct possibility. All the dies lack the customary initial-mark and there are no contraction marks or stops between the words. It proved difficult to compare the punches in detail and to reconstruct the legends in full because, as a result of the built-in clipping, little more than the bases of a few letters survive on most coins and, despite the wealth of die-duplicates, the tops of some letters are never in fact visible at all. The problem has been compounded by the legend of one quarter of each reverse die appearing more frequently on the under-sized flans than any of the other three. All sections of the obverse legend occur more evenly except for the part directly above the crown which is less often visible. (This evidence for the technique of striking will be discussed later.) The dies of the 483 cleaned coins are detailed in the Table of Legends.

TABLE OF LEGENDS

<i>Die</i>	<i>Number of coins</i>	<i>Size of most letters</i>	<i>Legend</i>	<i>Most frequently legible quarter</i>	<i>Remarks</i>
Obverse	483	Large	ECARCVS CEI (G)RA REX	—	G possibly an o but not o of reverses
London reverse	95	Large	TAS CIVI CO(N CON)	CIVI	N possibly another letter
York reverse 1	223	Large	CIVI TAS ERO RAC	RAC	Thinner A than on other coins with large letters
York reverse 2	21	Large	CIVI TAS ERO RACI	—	Medium sized R; R for B
York reverse 3	144	Small	(CIVI TAS) EBOB ACI	EBOB	Same broken B for B and R

The letters within brackets are either never visible on the coins or so little appears that their punches cannot be identified.

What were the prototypes for these forgeries? The effigy is a passable imitation of the official later fifteenth-century style including the characteristic crown: large and rather upright with a row of round holes along the head-band. This type of crown is first seen on the half-groats of Henry V but its earliest appearance on the penny denomination is during the Heavy Coinage of Edward IV. A crown of the same basic form survives until the end of the Open-crown coinage of Henry VII although by then it had generally become smaller, narrower and even more upright. The regal name ECARCVS is badly blundered but it is more likely to be essaying the commoner EDWARDVS, with W omitted in error and C for D as in CEI for DEI, rather than the rarer RICARDVS which requires the omission of the more important initial letter of the king's name and the

error, or gratuitous substitution, of E for I, a letter present in the available fount. Further, the DEI form was revived from 1465 on the local York dies of the Light Coinage of Edward IV and was later used on some, but not all, of the official dies at York and London.¹ The contracted form DI alone is employed on the pennies of Richard III.² The prototypes for the Queenhithe forgeries were therefore the Light Coinage pennies of Edward IV struck between 1465 and the end of the reign in 1483. It would not be profitable to try to narrow the field still further since the omission by the forger of the diagnostic marks of differentiation beside the bust is probably not significant in the light of his exclusion of such other details as the initial-marks. It is unlikely, however, that these forgeries were produced contemporaneously with their prototypes since it would have been difficult to pass them into circulation alongside the noticeably larger-flanned and heavier official pieces current shortly after the 1464 reform. They would, however, have been much easier to dispose of at the end of the century when the pennies in circulation were, for the most part, old and clipped coins of Edward IV and when the new sovereign-type pennies of Henry VII designed to replace them had not yet made their full impact on the circulating medium. These forgeries were therefore likely to have been produced some time in the decade 1490–1500 and, as they are self-evidently newly struck, most probably in London.

One curious feature of the obverse legend remains to be explained, and that is the use of the Latin regal name in full when the curtailed form without the final *vs* is invariable on the official pennies of Edward IV. The most recent use of the regal name ending in *vs* as a regular feature of the penny denomination had been the Leaf-Trefoil issue of Henry VI,³ but such earlier, heavier, coins had rapidly ceased to be a significant part of the currency after the 1464 reform and were unlikely to have influenced the legends of forgeries produced at the end of the century. The precedents need not have been numismatic ones. The forger or the person laying out the legends for him to reproduce on the dies may have been familiar with the king's name in full from other sources such as legal documents or have been someone of sufficient education to expand plausibly if, as it turns out, incorrectly the meagre remnants of the original legends visible on the worn and clipped pennies in circulation at that time. A certain sophistication of thought is also evident in the provision of variety by creating one London reverse and three dies, all different, for the commoner mint of York. The mutations of the reverse legends on the York dies and the four-to-one ratio of reverses to obverse—prodigal by contemporary official standards—could indeed be mere accident, the result of the unrepresentative nature of the present sample, the weakness of the dies, or the ineptness of the hammerman, but they recall to mind that the organizers of forgery production, as opposed to those who actually carried it out, were regularly drawn from the educated classes including even churchmen.

The average weights of the different die-pairings, excluding the uncleaned coins and eleven obviously corroded pieces, and of this group of 472 coins as a whole, are set out in the Table of Weights. A histogram was prepared of all the weights from figures

¹ C. E. Blunt and C. A. Whitton, 'The Coinages of Edward IV and Henry VI (restored)', *BNJ* xxv (1945–8), 47–9 (York pennies 1465–83) and 327 (London pennies 1473–83). Although pennies for Edward V with the boar's-head mark are potential, none are known today.

² Personal observation.

³ C. A. Whitton, 'The Heavy Coinage of Henry VI', *BNJ* xxiii (1938–41), 256. There is one abnormal die in *vs* in the Leaf-Pellet issue, p. 430.

corrected to two decimal places of grammes with an interval of 0.01 g and this is expressed in contracted form with intervals of 0.05 g in the Frequency Table. The small numbers of York reverse 2 present no doubt account for its abnormally higher average weight but they are not sufficiently numerous to affect the figures for the group as a whole. The Frequency Table and the weight-patterns both of the individual die-pairings and of the group of forgeries as a whole display a remarkably regular distribution very close to the perfect 'normal distribution' of statistical method where mode, median, and arithmetic mean are all at the same value—here 0.465 g (= 7.2 gr)—with the values on either side declining in symmetry. This distribution is in marked contrast to the consistently negatively skewed frequency-distributions demonstrated for recently struck die-duplicate, or closely die-linked, official coins in the later English medieval series.⁴ The explanation is the obvious one that the forger had no reason to cull his own underweight, debased coins: unlike official coins at the top end of a distribution, none of the forgeries were worth more than face value as bullion, indeed quite the reverse.

TABLE OF WEIGHTS

<i>Reverse dies</i>	<i>Number of coins</i>	<i>Average weights</i>		<i>Number of coins</i>		
		<i>Grams</i>	<i>Grains</i>	<i>Below average</i>	<i>On average</i>	<i>Above average</i>
London	91	0.462	7.1	47	—	44
York 1	219	0.464	7.1	105	3	111
York 2	19	0.503	7.7	9	1	9
York 3	143	0.467	7.2	73	—	70
Total	472	0.465	7.2	234	4	234

FREQUENCY TABLE

Weight in grams	0.27-0.31	0.32-0.36	0.37-0.41	0.42-0.46	0.47-0.51	0.52-0.56	0.57-0.61	0.62-0.66
Number of coins	3	16	78	137	136	70	26	6

The regular distribution also shows that the forger intended to strike his coins at a particular weight. The central figure is now 7.2 gr but, allowing for the effect of corrosion and cleaning, the original figure is likely to have been a little higher, say $7\frac{1}{4}$ or $7\frac{1}{2}$ gr. His success in getting 89 per cent of them within about $1\frac{1}{2}$ gr either way of the target figure points to considerable expertise. The official issue weight of the penny at the end of the fifteenth century was still the 12 gr at which it had been fixed in 1464, although the few hoards buried at this period including useful numbers of pennies suggest that the average weight of the currency coins was between 10 and 11 gr.⁵ In the circumstances, it was not possible to undertake an extensive programme of analysis but six coins were investigated by Mr M. R. Cowell of the British Museum Research Laboratory (see Appendix). Mr Cowell suggests that the forger was aiming at a fineness of about 80 per cent silver against the official standard of 92.5 per cent. The source of the metal was probably plate, official coins, or clippings from them adulterated with

⁴ M. M. Archibald, 'The Mayfield (Sussex) 1968 Hoard of English Pence and French Gros, c.1307', *Mints, Dies and Currency*, ed. R. A. G. Carson, pp. 154-6.

⁵ e.g. the Pennyrock Falls (Cumbria) hoard buried

c.1495 to be published by the author in a forthcoming volume of the Cumberland and Westmorland Society Transactions.

base metal, mostly copper, which was readily available in domestic as well as in industrial contexts. Allowing for both these forms of debasement, the forger was making a gross profit of between 7s. 6d. and 9s. 6d. in the pound although his costs, which there is no way of assessing, would have to be deducted from these amounts.

The die-axis of English coins at this period was not regular. The upper die was hand-held in position over the blank on the lower one without any mechanical means of controlling their relationship, nor was there apparently any attempt to do so by eye. Among the Queenhithe coins, however, the die-axes of the products of each pair of dies display a tendency to one alignment within a band of about 20°, although the particular alignment is different for each pair. In the case of the small numbers of coins from York die 2, the pattern is more haphazard, but in the other three cases approximately 85 per cent of the coins show a consistent alignment of this sort: London, c.135°; York 1, c.225°; York 3, c.0°; in each case $\pm 10^\circ$. This suggests that the hammerman struck large numbers of coins without laying down his upper die and that he could not therefore have positioned the blanks on the lower die himself. They must have been fed between the dies by another operative. In this, as in so much else, the forger is likely to have been following current official practice. The curious way in which the legend of one quarter of the reverse is most often visible on the flan to the exclusion of the others while the obverse legend does not follow quite so consistent a pattern is also explicable if the hammerman got into a good work-rhythm and was placing his upper die in the same position on each blank regardless of where it had been put on the lower die by a less consistent colleague.

In the fifteenth century the punishment for forgery was often death but, none the less, the uncertainty of apprehension and conviction, added to the huge profits to be made by the successful, induced people to take the risk. The present coins were found together in the bed of the Thames and without a surviving container. Although they could have been concealed somewhere inland and been washed down into the river at a later date, it would seem rather unlikely that in these circumstances they would have remained as a closely knit group. It would appear to be more probable that they had been deliberately thrown into the river by the forger or someone else when he feared to be caught with the damning evidence. If the latter were the case, there was clearly no *animus revertendi* on the part of the original depositor; he had purposefully abandoned the coins and, if so, there was no *prima facie* case for treasure trove. It might be objected that someone was unlikely to throw away coins which, on bullion value alone, were worth a month-or-two's wages, but with freedom or life itself at risk this may not be so surprising. In the absence of conclusive evidence, such cases have to be decided on the balance of probabilities. Where the Queenhithe coins were concerned, the Coroner decided that there was no *prima facie* case for treasure trove and the coins were returned to their finders. The Messrs. Smith generously donated two groups of six coins apiece to the British Museum and the London Museum. A full photographic record of the hoard including colour slides of the original patination were made before the coins were dispersed and may be consulted by students in the British Museum Coin Room.

APPENDIX

ANALYSIS OF FORGERIES FROM
THE QUEENHITHE HOARD

M. R. COWELL

Six die-linked forgeries of pennies of Edward IV produced at the end of the fifteenth century from the Queenhithe hoard were examined by X-ray fluorescence analysis and the results are set out below. The extent of the corrosion is such that the best accuracy could not be obtained, hence the silver and copper figures are only quoted to the nearest whole percent. The average suggests an intended fineness of about 80 per cent.

	Per cent silver	Per cent copper	Per cent gold	Per cent lead	Per cent arsenic	Per cent zinc
London reverse	85	14	0.1	0.8	< 0.1	< 0.1
London reverse	90	9	0.2	0.8	< 0.1	< 0.1
York reverse 1	86	12	0.2	0.9	< 0.1	< 0.1
York reverse 2	73	25	0.1	1.2	< 0.1	< 0.1
York reverse 2	66	33	0.2	0.7	< 0.1	< 0.1
York reverse 3	73	25	0.1	0.8	< 0.1	< 0.1

THE CONVERSION OF TESTOONS: A RESTATEMENT

C. E. CHALLIS

IN a previous article, which examined the fiscal aspect of the Great Debasement, I included a few remarks on the way in which the English mints were supplied with bullion.¹ I distinguished two distinct mechanisms: the manipulation of the price offered at the mint for both gold and silver and the compulsory conversion of testoons, or shilling-pieces, minted between the start of debasement and 1548. Though the question of mint supply was clearly incidental to my main theme, and consequently was touched on very briefly indeed, that part of my interpretation which related to the conversion of testoons was subsequently called in question by Professor J. D. Gould who, in an appendix to his book, not only faulted what I had written but also offered some fresh analysis and interpretation of his own.² To me, much of what Professor Gould has to say is suspect and it is the purpose of this note to explain why, partly by looking again at the reasons underlying the withdrawal of testoons and partly by examining the actual mechanics of the conversion.

I

The ostensible purpose of withdrawing testoons was the reduction of counterfeit coin in the English circulating medium. The proclamation of 10 April 1548 announcing the policy spoke of the 'fraud and corruption [that] hath of late time been used in the falsing of his highness' coin now current, specially of the pieces of 12*d.* commonly named testons' and went on to provide for the demonetization of testoons by the end of the year in order 'to prevent the like practice hereafter'.³ Such an explanation is, I believe, unconvincing largely because the problem of counterfeit silver coin in the English circulating medium hinged not on whether a particular denomination was minted but rather on the general condition of silver coin then in circulation. The counterfeiter made his profit by doing illegally exactly what the government did legally throughout the course of the debasement—namely, reducing the silver content of coins while continuing to pass them off at their full face value—and, broadly speaking, the larger became the gap between the intrinsic and face values the greater was the profit. As the intrinsic value of the official coin tumbled, the task of distinguishing legal from illegal tender became increasingly difficult. In 1546, for example, when the nominal fine silver content fell to only 4 oz. per lb. counterfeiters could even afford to match official coin, weight for weight, in fine silver, thereby ensuring a product which was intrinsically as good as its official counterpart, and still be assured of a handsome profit. In such

¹ C. E. Challis, 'The Debasement of the Coinage, 1542-1551', *Econ[omic] Hist[ory] Rev[iew]*, 2nd ser. xx (1967), 446-8.

the Economy in Mid-Tudor England (Oxford, 1970), pp. 187-98.

² J. D. Gould, *The Great Debasement: Currency and*

³ P. L. Hughes and J. F. Larkin, *Tudor Royal Proclamations* (New Haven and London, 1964), i, no. 302.

circumstances it is not surprising that counterfeiting should increase,⁴ and if the government was to provide an effective remedy it needed to restore the silver coinage to a fine sterling standard. Such an action would not have eradicated illegal coining at a stroke, for there always would be those willing to gamble whatever the circumstances, but by widening appreciably the gap between the silver content of legal coin and that of the counterfeit product, thereby increasing the chances of the latter being detected, it would have spelt the end of such large-scale activities as there were. Had the proclamation of 10 April 1548 announced such a rehabilitation of the coinage, one would indeed have agreed that a serious attempt to check counterfeiting had been made but, as we have seen, it did no such thing. It provided only for the withdrawal of a single denomination and can in practice have meant not that the counterfeiter was obliged to lay his trade aside, but rather that he switched from the production of one denomination, the testoon, to that of others, such as the groat, which were still a very profitable concern. In the second half of 1548 and early 1549 counterfeiting continued, and on 11 April, almost a year to the day since the withdrawal of testoons had been publicly announced, the government openly admitted as much by once again taking up the cudgels against those who 'have now of late attempted to counterfeit the testons, shillings, groats, and other the King's majesty's coins of silver, and in great multitude do privily bring them into this realm'.⁵

The demonetization of a single denomination, the testoon, could not and did not prove to be an effective antidote to counterfeiting, and it is because I am persuaded that Edward VI's government can never have expected matters to have been otherwise that I was inclined in my earlier article to look beyond the formal words of the proclamation and suggest that testoons were demonetized for fiscal purposes.⁶ Before subjecting this view to fresh scrutiny it would perhaps be appropriate to mention an alternative to it, proposed by Professor Gould, that 'the demonetization of testons was intended as the first stage in the introduction of a "two-tier" system of coinage, the debased coins being confined to smaller denominations with a superstructure of "good" gold and silver coins in denominations suitable for the conduct of overseas and wholesale trade'.⁷ That a two-tier system of silver coinage did exist in the later years of Edward VI's reign is not in dispute, for it has long been recognized that the revaluation of base coins and the introduction of the 11 oz. 1 dwt. standard of 1551 had precisely this effect. But to say that the first steps towards this solution were taken in 1548 with the decision to withdraw testoons simply will not do. It is plainly misleading to argue, as does Professor Gould, that testoons were recoined into 'small coins of 4, 6 and 8 oz.'⁸ fine and that in this way the silver circulating medium came to consist solely of debased coins of small denomination. Certainly part of the bullion which came in as testoons did re-emerge as groats and possibly other coins at the 4 oz. standard, but almost as much was in fact recoined into shillings, i.e. pieces of equal denomination with the testoon, either at an 8 oz. or at a 6 oz. standard. In other words, the conversion operation did not consist solely of transforming the largest silver denomination then in existence into

⁴ Though we should beware of exaggerating even this enhanced activity. C. E. Challis, *The Tudor Coinage* (Manchester, 1978), pp. 291-4.

⁵ Hughes and Larkin, *op. cit.*, no. 326.

⁶ I have suggested elsewhere that the withdrawal of testoons may also have helped to restore confidence in the

coinage. C. E. Challis, 'The Circulating Medium and the Movement of Prices in Mid-Tudor England', *The Price Revolution in Sixteenth-Century England*, ed. P. H. Ramsey (1971), p. 143.

⁷ *Op. cit.*, p. 197.

⁸ *Op. cit.*, pp. 166, 190.

smaller coins which could augment the supply of specie in some 'small denomination' tier of the circulating medium. Rather it represented the withdrawal of one type of twelpenny piece and its replacement partly by coins of a smaller denomination and partly by coins of similar face value but different type. Despite what Professor Gould suggests, the twelpenny piece remained a prominent part of the circulating medium. Indeed, if we consider total silver production between 1 October 1548 and the end of debasement in July 1551, the period when most of the testoons were converted and when the Edwardian coins of 8, 6, and 3 oz. fineness were issued, there can be no doubt that, as the months slipped by, this prominence turned into unmistakable predominance. Altogether during this period total known production of silver coin amounted to £1,249,416 of which no less than £918,531, or 73.5 per cent, was in shillings.⁹ Only because the twelpenny piece remained in circulation could it have been revalued, as undoubtedly it was, in 1551 to become part of the two-tier system of silver currency which was in fact introduced in that year.

In turning to discuss my own explanation of why testoons were withdrawn in 1548-9, it would be well to make clear from the outset that the withdrawal took place at a time when supplies of silver bullion to the mints were beginning to dwindle. Professor Gould has challenged this point, maintaining that 'at this time [i.e. 16 February 1548, the date when the mints were authorized to begin converting testoons] the general level of activity at the Mints, bearing in mind gold as well as silver, was in aggregate but little below its peak level, and indeed the converting of testoons did not really get under way until 1549 partly because the Mints were too busy with their other work'.¹⁰ But this is far from compelling reasoning. In the first place, if we are to judge whether the withdrawal of testoons was to stimulate silver production we must look at the figures for the output of silver alone, rather than at those for gold and silver combined, and if this is done it is clear that silver production by late 1547 was heavily down on previous years. For the year ending 31 March 1547 silver output amounted to £453,615, whereas in the following six months it reached only £119,113, or the equivalent of £238,226 for a complete year.¹¹ This massive fall in production can hardly have escaped notice as the withdrawal of testoons was planned towards the end of 1547 or early in 1548. Secondly, to state the obvious, as Professor Gould does, i.e. that the conversion of testoons did not in fact get fully under way until 1549, is to tell us what happened in practice, as events turned out, not what the government had in mind when planning the exercise. The order which went out to the mints was interpreted at Southwark and York, where conversion of testoons did begin in 1548,¹² to mean that the operation should progress without delay, and it seems fair inference that this is what the government had in mind. If one wants a reason why, despite this order, more testoons were not converted in 1548 one should look not as Professor Gould suggests at the pressures generated by other work but at the slowness with which testoons were surrendered. Because the original deadline set by the government for demonetization was 31 December 1548 many people continued to use their testoons throughout the second half of the year and it was only after repeated cajoling by

⁹ PRO. E 101/303/6, E 101/302/25, E 159/331 Rec. Trin. 41, E 101/302/23, E 101/302/27, E 101/303/7, E 351/2078, E 101/296/18.

¹⁰ Op. cit., p. 197.

¹¹ Challis, 'The Circulating Medium ...', Table 1, p. 118.

¹² Challis, op. cit., *Econ. Hist. Rev.* 2nd ser. xx (1967), Tables 9 and 13.

the government that they were finally persuaded to hand them in during the first part of 1549.¹³

As postulated, the idea that the conversion of testoons was a fiscal device is both simple and correct. Testoons varying in fineness from 9 oz. 2 dwt. to 4 oz. were withdrawn from circulation and recoinced either at the 4 oz. standard, as was originally envisaged in 1548, or at the 8 or 6 oz. standards introduced in 1549. Since in practice coins of these later issues contained no more silver than those of the 4 oz. standard, however, their higher fineness being neutralized by a reduction in weight, all the new coins made from testoons were, effectively speaking, of the 4 oz. standard and thus below the average fineness of the testoons they were to replace. Consequently, a profit was to be made on the conversion operation. The precise amount of profit depended, of course, on the relative proportion of 9, 6, and 4 oz. coin returned, and in making its calculations the government must necessarily have had regard both to the relative quantity of these types produced and what was likely to have happened to them since issue. Because the mint records still extant do not generally distinguish between one denomination and another,¹⁴ it is impossible to tell now how many testoons were in fact produced at each fineness but, if it may be assumed that the proportion of testoons to other coins remained roughly constant between 1542 and early 1548, when their production ceased, the figures for general mint output may give us some indication of the proposition the government had in mind when planning the withdrawal. Between the start of debasement and Michaelmas 1547 silver production amounted to £1,215,156 of which £250,578 was produced at York and Canterbury and thus contained no testoons.¹⁵ Of the remaining £964,578, £202,214 was in 9 oz. or 9 oz. 2 dwt. coin, and £340,375 in 6 oz., leaving £421,989 at the lowest 4 oz. standard.¹⁶ By the time the government took its final decision to withdraw testoons early in 1548 these proportions must have altered more in favour of 4 oz. coin which continued to be produced in the later months of 1547 and early 1548 but, even so, the government could still hope, on paper, to see roughly one testoon of the 9 oz. 2 dwt., 9 oz. and 6 oz. standards for every one 4 oz. fine. If so, the average fineness of the testoons coming in could therefore be expected to be approximately 5½ oz., which in turn would imply, if the new coin was to be 4 oz. fine or its equivalent, a profit of roughly 1½ oz. of fine silver per lb. At current prices, say 5s. 4d. per oz., this would amount to about 8s. per lb. gross.

As planned, then, the conversion of testoons operation was certainly a viable fiscal concern and through it coins to the value of £385,000 were sucked into the mint to be reprocessed.¹⁷ That in practice it proved less profitable than may at first have seemed likely was largely because few of the better coins were in fact surrendered in accordance with the government's wishes. Instead of being over 5 oz. fine the average fineness seems to have been under, and to a large extent the government itself was to blame. By raising the mint price for silver to £3.4 per lb. in October 1548, it made it possible for

¹³ Ibid., pp. 447-8.

¹⁴ Possibly because no record of denominations struck was ever kept in the first place. Certainly, according to Sir William Sharington, 'No Mynt kepeth rekenning what Coynes they make at this Daye of all Sorts', *Historical Manuscripts Commission*, Salisbury MSS i, no. 273, in extenso in S. Haynes, *A Collection of State Papers* . . . (1740), p. 92.

¹⁵ Professor Gould completely mistakes this point.

Consequently, his whole discussion of 'the ratio of 6 oz. testons to 4 oz. testons struck at York' and 'Canterbury's 6 oz. testons' has no meaning. Op. cit., pp. 194-6.

¹⁶ Challis, op. cit., *Econ. Hist. Rev.* 2nd ser. xx (1967). The sources listed for Tables 1, 6-13.

¹⁷ C. E. Challis and C. J. Harrison, 'A Contemporary Estimate of the Production of Silver and Gold Coinage in England, 1542-1556', *English Historical Review*, lxxxviii (1973), 834.

coins of the 9 oz. 2 dwt. and 9 oz. issues of 1542-5 to be sold back to the mint at a profit and, consequently, many of the testoons at these finenesses, which would in any case have been withdrawn in the next few months, were melted down privately and sent to the mint as bullion rather than as demonetized coin.

As a conclusion to this short discussion of the motives behind the withdrawal of base testoons in 1548-9, it is perhaps worth examining in detail a specific operation at one particular mint because this will not only substantiate clearly the statements just made about the viability of converting testoons but will also help to identify some of the mistakes introduced by Professor Gould in the course of his discussion. Production details of the 6 oz. coin made during the conversion of testoons operation at Tower I between May and September 1549 may be summarized as in Table 1:

TABLE 1
Tower I Mint: Conversion of Testoons to Coin 6 oz. fine, 1549

	lb.	oz.
Total quantity of testoons bought by the mint	18,003	10
Bullion added to the testoons when melted	4,026	2
Standard silver, 6 oz. fine, added to the testoons	341	5 $\frac{5}{8}$
Total quantity of metal melted	22,371	5 $\frac{5}{8}$
Total quantity of new coin produced	21,855	0
Metal lost by the moneyers over and above their allowance	163	5 $\frac{1}{2}$
Metal wasted in the melting	228	0 $\frac{5}{8}$
Metal wasted in the blanching	107	0
Metal lost by the moneyers at the standard allowance	17	11 $\frac{1}{2}$
Total new coins and wastes	22,371	5 $\frac{5}{8}$

Source PRO. E 351/2078.

From these figures we see clearly that Professor Gould's statement that on this occasion 'some 22,018 lb. of 6 oz. small coins were produced'¹⁸ is quite erroneous, for his figure is larger than the amount of coin actually struck, 21,855 lb. (which in any case was in shillings rather than small coins as he says). Even if one supposes that Professor Gould intended in his statement to give what he calls elsewhere the 'output' side of the account, i.e. the total of new coin produced plus all wastes incurred during manufacture, a figure of 22,018 lb. still has no meaning because it represents the addition only of the amount of coin produced and such metal as was wasted by the moneyers over and above their allowance, and thus falls short of the actual total 'output' figure of 22,371 lb. 5 $\frac{5}{8}$ oz.

If we must reject the figure offered by Professor Gould for the amount of coin or coin/wastes produced in this particular conversion operation, we must also reject his figure for the fine silver contained in them, for two reasons. In the first place, since the fine silver content is calculated by multiplying the total weight of coin and wastes by the fineness of the metal from which they were made it follows that if the first of these figures is incorrect, as we have seen that it is in Professor Gould's case, then so also will be the figure for the fine silver content. And, secondly, the figure which Professor Gould gives for the fineness of the coins/wastes is the nominal not the actual fineness. The nominal

¹⁸ Op. cit., p. 189.

fineness of this particular batch of coin was, as he quite rightly says, 6 oz., but since the remedy at the assay on this operation was 2*d.* per 72*s.*, or the equivalent of 0.56 dwt. per lb., the actual fineness was 5 oz. 19.44 dwt. The difference is small, but it means that he finishes up multiplying an incorrect figure for coins/wastes by a figure for fineness which is also incorrect. It is not surprising, therefore, that his figure for the fine silver content on this converting of testoons operation, 11,009 lb., differs from the correct figure of 11,130 lb.

To arrive at a figure for the fineness of testoons surrendered it is necessary to deduct from the fine silver value already established any other fine silver added during the operation and then divide what is left by the total weight of testoons surrendered. Since the account tells us that the fine silver content of the 4026 lb. 2 oz. of bullion added was 3888 lb. 5 $\frac{3}{4}$ oz. and we can calculate that the 341 lb. 5 $\frac{5}{8}$ oz. of standard silver (nominally 6 oz. fine but 5.97 in practice) contained 169.88 lb. of fine silver, we know that the original fine silver content was 7072 lb. This in turn means that the fineness of the original testoons was $7072/18,004 \times 12 = 4.71$ oz., not 4.63 oz. as Professor Gould suggests.¹⁹

II

This analysis of the fine silver content of surrendered testoons has led inevitably to some discussion of the actual mechanics of conversion, and it is necessary to pursue this aspect a little further in order to defend two assertions made in my earlier exposition and subsequently challenged by Professor Gould. The assertions in question are (1) 'The old testons, ranging in fineness from 9 oz. to 4 oz., were to be converted into groats and small moneys 4 oz. fine, and in the process the king was to take his inevitable cut'. And (2) 'Similarly, no gross profit/lb. is given (column 4) in these sections, because such profit as the king made depended on the amount of fine silver contained in the money brought to the mint, and could not be calculated beforehand in the normal way'.²⁰ Concerning these statements, Professor Gould concludes that 'while Dr. Challis is not explicit on this point, I think it is fair to claim that he leads the reader to infer that the King gained because the *average* intrinsic value (that is, fine-silver content) of the testons brought in was higher than that of the groats and smaller coins which the subject got in exchange'.²¹ In so far as these words interpret the first of my statements they are correct, because it is beyond dispute that the average silver content of the surrendered testoons *was* higher than the 4 oz. standard in which the new coin was struck in 1548 and, consequently, I have no hesitation in repeating that the operation did involve an 'inevitable cut' for the government. In theory, this explanation also holds good for the subsequent conversion of testoons to coins of 8 or 6 oz. fine. As is well known, the intrinsic value of these coins was no greater than that of those at 4 oz. fine because in each case the improved fineness was neutralized by an adjustment in weight. Consequently, had testoons which, as we have seen, had an average fine silver content above 4 oz. been converted to an 8 or 6 oz. standard, a margin of profit similar to that on converting testoons to 4 oz. coin would have materialized. In practice, of course, there were difficulties. To achieve either the 8 or the 6 oz. standard it was necessary to refine the withdrawn testoons, either by the

¹⁹ Op. cit., p. 189.

²⁰ Challis, op. cit., *Econ. Hist. Rev.*, 2nd ser. xx (1967), 447, 455-6.

²¹ Op. cit., p. 188.

extraction of copper or by the addition of high-grade silver. In practice, the second operation was technically easier and was adopted, thereby determining that the profit on the conversion of testoons to 8 or 6 oz. fine coin included the profit on coining the fine silver which had been added to the testoons to bring them up to standard. It is because I recognize that this element of profit was contained in the conversion of testoons operation that I do not say in the second statement called in question that the king's profit depended *solely* on the fine silver content of the old testoons, and that *I add in as one of the costs of conversion the expense of buying silver to make up the standard*. Only by ignoring that I do not say *solely* and, though admitting that I make allowance for the silver added, perversely refusing to accept the implication of my analysis, namely, that I do recognize that part of the profit on the conversion of testoons came from the coinage of the fine silver which was added, can Professor Gould reach his conclusion.

Contrary to what Professor Gould says, then, I am well aware that the profits on the converting of testoons operations for which the under-treasurers finally accounted derived from two sources: the difference between the intrinsic value of the testoons which were surrendered and the intrinsic value of the new coins which were issued, and the coining of fresh bullion added to the testoons. In my earlier discussion I lumped together gross profits from both these sources not because, as Professor Gould suggests, I failed to realize what was happening, but because I followed contemporary practice. None of the under-treasurers' accounts in which the converting of testoons is recorded seeks to list separately profits coming from the two different aspects of the conversion operations, and for convenience I followed the same practice when setting out my tables.

Before leaving the subject of the profitability of converting testoons, two further issues need mentioning. The first is straightforward and involves nothing more than the correction of a misunderstanding by Professor Gould. He says that 'the Tables which conclude the article appear to show that the "converting testons" operation yielded at those Mints for which the relevant accounts are extant a profit of some £92,000'. And then goes on to add that 'this may be the appropriate point at which to remark that in referring hitherto to "profit" I have had in mind the remainder left by subtracting in respect of each Mint Dr. Challis's item (10), "Coining charges: Testons" from item (8), "Gross Profit"'. This is in fact an over-generous definition of net profit, for it fails to attribute to the "converting testons" operation any part of item (12), "General Mint Expenses" (chiefly salaries and wages). This would surely be appropriate, for at most Mints recoinng testons was the major, or even the only, activity for a good part of 1549.²² The reader should be clear that both the figure for profit given here by Professor Gould and the method used to obtain it are entirely of his own making. Because of the make-up of the mint accounts which necessarily contain allowances for general mint expenses, such as salaries, which cannot be apportioned to any single coinage operation, it is not possible to give a precise net profit on the conversion of testoons or, for that matter, on practically any other coinage operation during the debasement. It is for this reason that, in setting out the tables in my earlier article, I placed 'General Mint Expenses' where I did and in no way implied that the net

²² Op. cit., pp. 187, 191.

profit on converting testoons could be calculated by deducting item (10) 'Coining Charges: Testons' from item (8) 'Gross Profit'. When, therefore, Professor Gould defines what the net profit on converting testoons was and then opines that that is 'in fact an over generous definition of net profit', the reader should be clear that the definition is his, not mine, and that the difficulties he encounters do not surprise me. Contrary to what Professor Gould says, I *do not* give a 'method of calculating net profit'²³ on the conversion of testoons operation.

A further aspect of the profitability of converting testoons which requires some discussion is the third item of profit which Professor Gould claims to have existed in certain cases over and above that which arose, as we have seen, from the surrendered testoons being of a higher standard than the new coin which replaced them, and from the coinage of fresh bullion added to the testoons during conversion. Professor Gould arrives at this conclusion in the following way. He begins by arguing that the 'input' side of the conversion operation, i.e. the total quantity of metal melted, ought to balance the 'output' side, i.e. the total of new coin produced plus any wastes suffered during the manufacture of the new coin. He says, quite rightly, that such balancing is not always possible because certain items are not carefully recorded in the accounts. For example, for the conversion of testoons into 4 oz. coin at Tower I the amount of alloy which was added to the testoons at the melting is omitted. But he then goes on to claim, and it is here that his problem arises, that even if all the relevant information *is* given the two sides of the conversion operation still need not balance. 'That this is so', he says, 'is proven by the Southwark account, on which *all* the items mentioned, including alloy added, are to be found, and which yet does not "add up"'. The "output" side shows a total production (including "wastes" and "remains") of 46,670 lb., whereas on the "input" side we can account for but 44,108 lb. Clearly something is missing from the latter. But what?'²⁴ The answer which he provides is that there were 'unrecorded "inputs" on government account', which he explains in the following way:

If a subject owing money to the King discharged his debt by delivering testons to the Mints, this transaction (though doubtless itemized elsewhere in the Mint's working records) was not, and could not be, included on the 'input' or 'allowances' side of these summary accounts, since the purpose of this side was to list out-payments by the Under-Treasurer, and no such payment was here involved. A subject came into the Mint, settled his debt to the King by surrendering testons to the receiving officer, and got nothing back. There was thus no 'allowance' to be recorded. But the testons in question *did* figure, though covertly, on the 'output' or 'charges' side, for they were simply thrown into the melting-pot with the rest and ultimately emerged as an (unitemized) part of the production of small coins.²⁵

In analysing Professor Gould's conclusions we should note that, as Tables 2-5 show, the figures which he gives for the 'input' and 'output' sides of the Southwark conversion operations are erroneous. The correct figures are 47,436 lb. 6½ oz. and 49,839 lb., respectively. These errors arise partly because Professor Gould has failed to take account of certain of the wastes incurred in the operation and certain of the smaller quantities of metal added, and partly because he has omitted from his reckoning the conversion of testoons into 4 oz. coin undertaken partly in 1550 and partly in 1551. Because he is unaware that 1999 lb. 5¼ oz. of 4 oz. coin was produced from converted testoons in these years his total figure for coin at this standard given under the heading 'C. Converting Testons: Southwark: 4' is also erroneous.²⁶

²³ Op. cit., p. 188.

²⁴ Ibid., p. 192.

²⁵ Ibid., p. 193.

²⁶ Ibid., p. 39.

TABLE 2

Southwark Mint: Conversion of Testoons to Coin 4 oz. Fine, 1548-9

	lb.	oz.
Total quantity of testoons bought by the mint	17,126	2
Alloy added to the testoons when melted	3,192	10
Standard silver added to testoons when melted	199	0
Brocage and cissel added to testoons when melted	172	0
Total quantity of metal melted	20,690	0
Total quantity of new coin produced	19,582	6
Metal lost by the moneyers over and above their allowance	402	0
Metal wasted in the melting	182	10
Metal wasted in the blanching	308	2 $\frac{3}{4}$
Metal lost by the moneyers at the standard allowance	12	9 $\frac{1}{2}$
Brocage remaining	205	9 $\frac{1}{2}$
Total new coins, wastes, and remains	20,694	1 $\frac{1}{2}$

TABLE 3

Southwark Mint: Conversion of Testoons to Coin 8 oz. Fine, 1549

	lb.	oz.
Total quantity of testoons bought by the mint	3,981	1
Fine silver added to the testoons when melted	1,993	11
Total quantity of metal melted	5,975	0
Total quantity of new coin produced	5,089	7 $\frac{1}{2}$
Metal lost by the moneyers over and above their allowance	33	6
Metal wasted in the melting	25	6
Metal wasted in the blanching	39	4 $\frac{3}{4}$
Metal lost by the moneyers at the standard allowance	4	3
Brocage and cissel remaining	104	8 $\frac{1}{2}$
Total new coins, wastes, and remains	5,296	11 $\frac{1}{2}$

TABLE 4

Southwark Mint: Conversion of Testoons to Coin 6 oz. Fine, 1549

	lb.	oz.
Total quantity of testoons bought by the mint	12,836	4 $\frac{1}{4}$
Fine silver added to the testoons when melted	5,781	1 $\frac{1}{2}$
Standard silver added to the testoons when melted	19	2
Total quantity of metal melted	18,636	8 $\frac{1}{4}$
Total quantity of new coin produced	21,157	7 $\frac{1}{4}$
Metal lost by the moneyers over and above their allowance	140	0
Metal wasted in the melting	230	5
Metal wasted in the blanching	162	2 $\frac{3}{4}$
Metal lost by the moneyers at the standard allowance	17	7 $\frac{1}{4}$
Total new coins and wastes	21,707	11 $\frac{1}{4}$

TABLE 5

Southwark Mint: Conversion of Testoons to Coin 4 oz. Fine, 1550-1

	lb.	oz.
Total quantity of testoons bought by the mint	1,632	6
Fine silver added to the testoons when melted	45	10½
Bullion added to the testoons when melted	29	0
Alloy added to the testoons when melted	427	6
Total quantity of metal melted	2,134	10½
Total quantity of new coin produced	1,999	5½
Metal lost by the moneyers over and above their allowance	52	5
Cissel remaining	37	7
Metal wasted in the melting	21	4
Metal wasted in the blanching	27	6½
Metal lost by the moneyers at the standard allowance	1	7½
Total new coins, wastes, and remains	2,139	11½

Notes to Tables 2-5

1. Source PRO. E 159/331 Rec. Trin. 41.

2. In addition to the quantity of testoons given in the account under the appropriate headings for the conversion of testoons into 4, 8, and 6 oz. coin I include here small sums, worth only £100 in all, which were said at a later date to have been overlooked when the original account was passed. The additional weights of testoons added to allow for these original omissions in the 4, 8, and 6 oz. operations are 12 lb. 6 oz., 8 lb. 4 oz., and 20 lb. 9½ oz., respectively.

In the original account only part of the brocage remaining on the conversion of testoons to 4 oz. coin in 1548 and the conversion of testoons to 8 oz. coin in 1549 was in fact declared and, consequently, the remainder—18 lb. 9½ oz. on the first operation and 67 lb. 2½ oz. on the second—was charged separately on a subsequent account. Here a single, composite, figure is given in each case.

Unacceptable though Professor Gould's figures are for the 'output' and 'input' sides of the conversion of testoons operations at Southwark, it is clear that his general assertion that the 'output' side does not balance the 'input' side is correct, and had his explanation of this phenomenon been acceptable no more need have been said on the subject. Unfortunately, however, Professor Gould's interpretation is not to be trusted. To begin with, if testoons had been surrendered to the mint for the reasons he suggests, i.e. the settlement of debts to the Crown, they would have constituted a charge on the under-treasurer and as such would undoubtedly have been itemized, as other receipts were, on the 'charge' of the account. Similarly, if these testoons had then been consumed in a conversion operation the under-treasurer would have been able to claim allowance for them on the 'discharge' of his account. In short, we can be quite sure simply on *a priori* grounds that any testoons which were received in payment of sums owing to the Crown *would* have appeared twice in the under-treasurer's account and could therefore be included by anyone choosing to reconstruct those accounts on both the 'input' and the 'output' side of the conversion operations. Over and besides this theoretical objection to Professor Gould's interpretation is the practical consideration that he has plainly misinterpreted the meaning of the proclamation of 22 May 1549. According to Professor Gould, this proclamation 'specifically provided that the King's debtors might satisfy their obligations by proffering testons to the Mints',²⁷ and it is because he believed this statement to be correct that he went on to speculate, inaccurately as we have seen, on how such transactions might have been recorded in

²⁷ Op. cit., p. 192.

the mint accounts. But what Professor Gould says cannot be substantiated by the proclamation, which contains the following provisions concerning the payment of testoons:

all such sums of money as shall be due to his majesty, as well for the relief granted in the last sessions of the parliament as for all other rents and debts, may be paid in good and lawful testons, of the stamp and coin of his majesty's father, at any time before the first of June next following, and so received of his highness' treasurers until the said first of June next following only, after the rate and value of 12*d.* every teston. After which time, his highness' pleasure is that in no wise the said testons be any more received of any his highness' officers of receipt, of or for that price.

Nevertheless for the space and time of two months after, that is to say, unto the end and last day of July next following, his highness is content that all good and lawful testons at his majesty's mints shall be received for bullion, after the rate of 12*d.* the piece, of any person who shall bring them thither; and further that it shall be lawful to any man to buy any good and lawful testons of the said coin and stamp of the late King, and made in any of the mints within this realm of England, to that intent to bring them to the mints, of any person not disposed to bring them himself, so that he do buy them for no less price than after 11½*d.* the piece and not under . . .

And his highness further is content that all his officers and ministers may receive all such good and lawful testons, and to repay them again unto his highness, after the said price of 11½*d.* the piece, during only the said months of June and July. In the which time for that price of 11½*d.* the piece, they shall refuse no lawful and good testons of any his highness' subjects.²⁸

These quotations make it quite plain, in the first place, that the government was allowing debts, such as taxes, to be paid to the treasurers of the respective revenue courts in testoons at their full face value down to 1 June, and at 11½*d.* each between then and the end of July. And, secondly, that in June and July anyone who wished to sell testoons to the mint not only might do so at 12*d.* per testoon but additionally might buy up testoons at 11½*d.* each from anyone unwilling to surrender testoons to the mint personally. Clearly, two quite distinct types of transaction were being authorized: either the settling of debts in the normal revenue courts by paying testoons, or the selling of testoons to the mint. By conflating these two types of operation Professor Gould hopelessly confuses his reader who is left unaware that whereas there is, and can be, no evidence of the mints settling debts to the Crown in the way he suggests, there is clear evidence of the mints receiving testoons in the summer of 1549 according to the terms of the proclamation. Sir Edmund Pekham, high treasurer of the mints, certified the government that between 1 and 22 June of that year the mints in London had received £33,348 in testoons, of which £18,198 had already been exchanged into current money and the remainder, £15,150, awaited payment in a similar way.²⁹

To reject Professor Gould's explanation of why the 'input' side of the conversion of testoons operations at Southwark should be smaller than the 'output' side is not, of course, to explain that phenomenon satisfactorily. Indeed, one wonders if it can ever be explained from the documents still extant. The mint accounts under discussion here were the final reckonings of the under-treasurers, designed to reveal the indebtedness of these officials to the Crown. As a result they omitted a great deal of the detail to be found in subsidiary documents and often compressed into a short compass what was

²⁸ Hughes and Larkin, *op. cit.*, no. 332.

²⁹ PRO, SP 10/7, no. 38 (ii). The total previously given by Symonds and myself for the number of testoons received at this time is £2090 too high because both of us added in a payment made to two foreign merchants

which had nothing to do with the receipt and exchange of testoons. H. Symonds, 'The English Coinages of Edward VI', *BNJ* xi (1915), 141-2; C. E. Challis, *The Tudor Coinage* (Manchester, 1978), p. 98 n. 189.

explicitly and elaborately set out elsewhere. Thus, while we may be reasonably sure that the accounts of the under-treasurers are a sound guide to the fiscal success of debasement, it is sometimes very difficult to know whether a statement in the accounts is a statement of actual fact or a shorthand version of some more complicated situation. One instance where we may be sure that shorthand was employed relates to the profit charged to Sir John York at Southwark by virtue of the sweep of the melting houses. On the surface all seems to be in order because Sir John was charged with 42 lb. 8 oz. of fine silver at 72s. per lb., or a total of £153. 12s. Yet when we consider that the sweep resulted from 'the grinding of the burnt refuse of the melting-house, which consists of the sweepings from the floor, partly-used charcoal and dirt'³⁰ we may be sure that in saying that the sweep amounted to 42 lb. 8 oz. of fine silver the accountant meant that this was the fine silver equivalent of the sweep and not the total weight of material actually handled. This has significance for the conversion of testoons operations because Sir John York claimed that he had added fine silver to the 8 and 6 oz. operations of 1549 and the last batch of coins at 4 oz. made from converted testoons. If he did just add fine silver, which is highly unlikely because in the sixteenth century bullion was usually received at the mint as an alloy, at or about the coinage standard of one of the principal European currencies, we must clearly accept the figures he gives as they stand. But if Sir John melted bullion of which only the fine silver equivalent is stated in the accounts then a greater weight of metal went into the melting-pot than the accounts actually indicate. In other words, simple accounting practice may be the reason why the 'input' side of the Southwark accounts is smaller than the 'output' side. Before we can perform various calculations from the accounts, therefore, we must be quite sure what the accounts mean when a weight of fine silver is given: is it an actual quantity of fine silver added to some particular operation or is it simply the fine silver equivalent of a larger quantity of bullion? In an account like that for the 6 oz. coin made from converted testoons at Tower I (Table 1) all is perfectly clear. The accountant gives the total weight of material and the fine silver equivalent. If one adds into the 'input' total the weight of bullion melted on this occasion then the 'input' total will correspond, as we have seen, to that for the 'output' side. But if one adds in only the fine silver equivalent of the bullion, i.e. 3888 lb. 5¼ oz. instead of 4026 lb. 2 oz., the 'input' side will be 137 lb. 8¼ oz. smaller than the 'output', and what Professor Gould would see as the Southwark situation would be achieved.

To some extent, then, the language of the mint accounts may help to explain apparent discrepancies between the 'input' and 'output' sides of the conversion of testoons operations at Southwark. And so too does the fact that the accountants did not include every detail of a particular operation in the most obvious place. Thus, 67 lb. 2½ oz. in remains from the 8 oz. standard, which should have been charged on that account, was not finally charged until the last conversion into 4 oz. coin. And the same is true of 18 lb. 9¼ oz. of remains from the first 4 oz. conversion operation. But helpful though these suggestions and facts may be they do not in practice add up to a complete solution to the problem in hand, for the simple reason that though they may help us to explain why the 'input' side of the conversion operations may on occasion appear to be smaller than the 'output' side, they do not solve the related problem, passed over

³⁰ G. F. Ansell, *The Royal Mint* (1871), p. 140.

by Professor Gould, of why in the case of the 8 oz. conversion at Southwark (Table 3) the 'output' side is smaller than the 'input'. Obviously, it would be perfectly possible to speculate on the reasons for this observed imbalance but without better information to guide us such speculation would hardly be very conclusive. Only when better documentary evidence does become available shall we be able to tie up this particular loose end of the debasement problem.

III

As a footnote to this analysis of the converting of testoons operations it is necessary to touch very briefly on a further problem discussed by Professor Gould, namely, the 'geographical inertia in the circulation of coins' by virtue of which, he claims, the composition of the circulating medium in a particular area will reflect the coin output of the local mint in the immediately preceding period. Thus he says:³¹

the Canterbury Mint had only begun work in June 1545, and the ratio of 6 oz. coins of the 1545-6 issue to 4 oz. coins of later issues struck at Canterbury was substantially lower than the London ratio. If then we suppose, as is entirely congenial, a degree of geographical inertia in the circulation of coins, the circulating medium in the neighbourhood of Canterbury would have been expected to contain a lower proportion of 6 oz. and a higher proportion of 4 oz. testons than in the London area.

And, again:

the Bristol Mint did not start work until after the 6 oz. issue of 1545-6 had been discontinued and superseded by the 4 oz. coins, and the Bristol Mint had never produced any base testons but those of the latter fineness. Given the same assumption of a degree of geographical inertia in the circulation—an even easier assumption here because of the greater distance from any other Mint—there is no reason to have expected anything other than a very small admixture of better coins which may have found their way to the West Country in the normal course of trade and travel.

Before reaching such conclusions Professor Gould ought to have satisfied himself on two basic issues—the rate at which coin produced in the provinces is likely to have moved elsewhere, and the rate at which coin produced outside a particular area may have moved into it—but apart from a nod towards the second of these problems he does nothing of the kind. He ignores the fact that a large proportion of the total face value of coin produced in the provinces constituted the king's profit on coinage operations and as such was remitted to Sir Edmund Pekham, high treasurer of the mints, who in turn disbursed these sums outside the area where they had been produced. At Canterbury, for example, no less than 41 per cent of the total face value of coin produced was remitted to Pekham in this way.³² Secondly, and more importantly as far as the converting of testoons operations are concerned, Professor Gould ignores firm evidence that coin and bullion were sent from London to the provinces to be coined. Under interrogation following his arrest in 1549, Sir William Sharington, under-treasurer at the Bristol mint, had this to say:

He hath ben served of Bullyon (at the Begynning) of the por Comons, which brought it in but a lytle at oons by the Say Master and Graver, by Mr. *Pecham* oons, 500 Weight, by oon *Robert Browne*, and others whos Names I cannot well remember . . .

He hath receyved of Mr. *Dunnch*, Mr. *Fletewood*, oon *Peterson* and *Fosskeryne*, to what Sum he knoweth not, but as yt may appere by a Bying Boke remayning in *Bristow* . . .

³¹ Op. cit., pp. 194-5.

³² PRO. E 101/302/25.

He was glad for lack of Bullion (to kepe his Men in Worke) to receyve meny Testons of Mr. *Dunch*, as yt apperethe in a Rekening betwene them; and the rest of meny others that brought them in to the Mynt . . .

He declarethe fether, moche of his occupying was employed uppon bying of Sylver, solde in to the Mynts of the Towre, and *Southworke*, and was put in by the Hands of Mr. *Dunch*, and the Money returned by him, who also bought and solde for him, as he did for the King, having for the most Part 1000 *l.* of his in his Hands, besydes that I delyvered him . . .³³

Clearly, these remarks do confirm the obvious, which is that Bristol was able to rely to some extent on local bullion supplies, but they also show, equally clearly, not only that the principal mint officials—Sir Edmund Pekham, high treasurer of the mints, Thomas Fletewood, comptroller of Southwark, and William Dunch, auditor of all the mints—sent bullion from London to Bristol and had their return in coin from there, but also that many of the testoons which were recoined at Bristol under Sharrington were sent quite specifically from London for the purpose. In the face of such testimony it is plainly unjustifiable to analyse, as does Professor Gould, the composition of testoons at Bristol and then conclude that the poorness of standard was dictated by ‘geographical inertia in the circulation of coins’.

³³ Haynes, *op. cit.*, pp. 63–5.

NOTES ON THE VICIT LEO TESTOONS OF MARY QUEEN OF SCOTS

JOAN E. L. MURRAY AND J. K. R. MURRAY

TESTOONS and half-testoons with the reverse legend *Vicit Leo de Tribu Iuda* were struck in 1560 and 1561. A major division within the 1560 pieces is provided by the form of contraction for *-que* at the end of the obverse inscription, which is an abbreviated version of *Franciscus et Maria Dei Gratia Rex et Regina Francorum Scotorumque*. Initially, this contraction took the form which in this context is usually described as B, but which in manuscripts can be seen to be based on the small letter q; later in 1560, and on all the 1561 pieces of this type, a capital Q was used (with a stroke through the tail, as contraction mark). At the same time there was a change in the form of crown over the shield on the obverse. One of us (J. K. R. M.) has already published an article on this coinage and drawn attention to other changes in the puncheons used for some major features, which do not exactly coincide with the change from SCOTOR B to SCOTOR Q.¹ The other (J. E. L. M.), in a paper read to the Society in 1976, has argued against dating the introduction of this type to before the death of Mary of Guise, the regent: the treatment of this question below makes some new points as well as recording the previous arguments. In the other parts of this article, two anomalous varieties are discussed, and their approximate positions in the sequence of varieties is determined.

What Authority Introduced this Type?

The Scottish Reformation became effective in 1560, as one result of a revolution against French domination. It would not be surprising for these momentous events to be reflected in the coinage, and indeed it is clear that the end of the issues of base billon lions (better known as hardheads) in 1560 was a consequence of the end of the war. For the testoons, however, the documentary evidence is inadequate to determine the date of the change of type and thus the authority responsible for this. Burns implicitly assumed that the change was made during the regency of Mary of Guise, who died on 11 June 1560, but presumably he did not consider the arguments which follow. An important consideration is the isolated and almost powerless position of the regent during 1560, i.e. from 25 March until her death.

A brief survey of the history is necessary to put in context the known events directly affecting the Scottish mint in 1559 to 1560.² By May 1559 Perth and Dundee had publicly adhered to the reformed faith. There was increasing militancy, both by the regent's government, which outlawed the protestant preachers, and by the 'congregation', which was joined by further prominent lords when the government garrisoned Perth. In June the insurgents had considerable success, and at the end of the month

¹ 'The Scottish Coinage of 1560-61', Spink's *Numismatic Circular* (1967), 95-6.

² Individual references are given only for details

not available in G. Donaldson, *Scotland: James V to James VII* (vol. iii of *The Edinburgh History of Scotland*), in Chapter 6, 'The Revolution against France and Rome'.

they entered Edinburgh, while the regent retreated to Dunbar. Before 1 July they 'stayed the irons' of the mint, an action which they claimed to be 'for most just causes', because of the quantity and baseness of the hardheads then being struck.³ The Hopetoun manuscript entitled 'Anent Cunyie ane ample discourss' enables us to assign to 21 July a change of warden and counterwarden⁴ (although the gifts of office to the new men were dated in October and November⁵): it seems safe to assume that Walter Mosman and John Gilbert, the two who demitted office, did so out of sympathy with the insurgents. Shortly afterwards a truce was concluded, the agreement to return the coining irons being dated 23 July.⁶ John Knox had been appointed minister of Edinburgh, and one of the conditions of the truce was that the capital might choose its own religion.

Although the lords of the congregation withdrew from Edinburgh, they arranged to reassemble their forces in September. Meanwhile the government fortified Leith, and large reinforcements of French troops arrived in August and September. In mid October the insurgents occupied Edinburgh again, now with the duke of Chatelherault (former regent, and next of blood to the queen) as their nominal leader. They declared Mary of Guise (who this time went to Leith for safety) to be suspended from the regency. Their assault on Leith failed and their forces diminished, some being mutinous for lack of pay. They left Edinburgh on 6 November, but previously made preparations for coining their plate, to pay their troops; 'and therethrough David Forrest, John Hart, and others who before had charge of the Cunyie-house, did promise their faithful labours'.⁷ These others did not include a willing die-sinker, and James Cocky began that work for fear of his life, according to his own testimony. The types were a cross and crown of thorns on one face and a tablet bearing the words *Verbum Dei* on the other.⁸ Forrest, who was general of the mint, is named by Knox as an adherent as early as 1555: he went to England on 12 November 1559, because of the troubles.⁹

French troops soon took the offensive, but late in January an English fleet in the Forth cut off their communications, and they had to retreat from Fife. Full English help for the insurgents was secured by a treaty concluded at Berwick on 22 February, by which England would intervene for the defence of the liberties of Scotland, i.e. against domination by France but *not* against the lawful sovereigns of Scotland. On the same grounds, many Scots who were not against the old forms of religion joined the rebellion. Lord Erskine, the keeper of Edinburgh castle, was an important neutral, apparently willing to use his guns against either party if provoked.¹⁰ He agreed, however, to receive the regent, and she moved from Holyrood to the castle on 1 April, after English troops had entered Scotland. Minting operations were presumably transferred to the castle at about the same time, since payments were made for building

³ John Knox, *History of the Reformation in Scotland* (ed. W. C. Dickinson, 1949), i. 193-4. (Hereafter cited as Knox.) From 1558 the hardheads were only 1/24 fine.

⁴ This manuscript, now in the British Library, is printed in R. W. Cochran-Patrick, *Records of the Coinage of Scotland*, i. The only relevant pages for the *Vicit Leo* testoons are 100-1. Footnotes will not be given for subsequent references to these pages of this Hopetoun manuscript.

⁵ *Registrum secreti sigilli regum Scotorum: the Register*

of the Privy Seal of Scotland, v, nos. 697, 715. (Hereafter cited as RSS.)

⁶ Cochran-Patrick, *op. cit.* i. 89.

⁷ Knox, i. 257.

⁸ 'Report by de la Brosse and d'Oysel on Conditions in Scotland 1559-1560', *Miscellany*, ix, Scottish History Society, 3rd ser., vol. 50 (1958), 123-4.

⁹ *Calendar of State Papers relating to Scotland and Mary, Queen of Scots*, i. 265. (Hereafter cited as *Cal. SP Scot.*)

¹⁰ *Ibid.* 262 and 714.

a mint there (and repairing that at Holyrood) in the period 11 February to 21 April 1560.¹¹

The English forces besieging Leith met stubborn resistance, but French envoys were already negotiating with the English before the death of Mary of Guise 'removed an obstacle to the conclusion of hostilities'. The treaty of Edinburgh, concluded on 6 July, was between France and England, but at the same time concessions to the Scots were made in the name of Francis and Mary. These gave some legal status to the Protestant-dominated party: a parliament was to be called and a council nominated to govern Scotland. Nearly all the French troops, and the English ones, were to withdraw.

The available bullion records, for the periods which must include the *Vicit Leo* testoons, should be reconsidered in the light of the above events. In round figures, those given in the Hopetoun manuscript, by the mintmaster, are as follows:

John Acheson, 21 July 1559 to 7 June 1560	196 stone
John Hart, 'fra the vij of Junij 1561'	741 stone

There is obviously some omission in the manuscript, in giving Hart's dates. They should perhaps be from 7 July 1560 to 1 June 1561, since Acheson's reinstatement was apparently effective from 1 June (or July) 1561.¹² Figures are also given for testoons struck by Acheson in 1561 and 1562, but one can be confident that all these were of the portrait type. (For this coinage, puncheons and dies were to be made by Anthoine Brucher, in Paris: Mary's letter to the Cour des Monnaies, requesting permission for this, is dated 24 February 1561, from Fontainebleau.)¹³ *Vicit Leo* testoons, like the preceding ones known as lorraines, maintained the standards of weight and fineness of those introduced in 1556. Thus one cannot be certain that the writer of the Hopetoun manuscript would distinguish between the types when giving the mintage figures, if the change of type did not coincide with a change of master or other relevant mint official, like the warden. The treasurer's accounts, however, are also available, for the later part only of Acheson's period from July 1559 to June 1560. Between 1 December 1559 and 11 June 1560, he (or the thesaurar clerk) received £1580 and £15,083 odd, from silver coined in testoons and lions respectively; in both cases he supplied the silver, so that these figures represent not the seignorage but the entire proceeds after deduction of expenses.¹⁴ £1580 means 6320 testoons, or nearly 5 stone of silver, since they were struck at five to the ounce, 1280 to the stone, and were current at five shillings. Unfortunately, although the treasurer's accounts would normally record the royal profit from the coinage of bullion from other sources, or the receipt of fixed sums when the mint was farmed, we cannot be certain that this account gives the entire mintage for the period. Other considerations, however, make it probable that this was the case. The Hopetoun manuscript names three sources of bullion for the period

¹¹ Cochran-Patrick, op. cit. i. 84, from *Accounts of the Lord High Treasurer*, ii. 4. (Hereafter cited as *Treas. Accts.*)

¹² The Hopetoun manuscript, which gives 1 July, certainly has June and July confused in quoting the date of the regent's death. Acheson accounted to the treasurer for 1 June 1561 to 20 Feb. 1562.

¹³ F. Mazerolle, *Les Médailleurs Français* . . . (Paris, 1902), i. 55.

¹⁴ Cochran-Patrick, op. cit. 89. The preceding item in *Treas. Accts.* ii. 3 records the receipt of £2646 from the sale of nearly 9 stone of silver vessels belonging to the late queen regent, but this is not under the heading *Cona*. Presumably this plate was sold after her death, to meet various obligations, since the price was 23s. per ounce, whereas the Hopetoun manuscript states that it was only when John Hart was master that the price of pure silver was raised from 22s. to 24s.

December 1558 to June 1560—foreign gold and silver brought home by merchants; that supplied by the French treasurer to pay the French soldiers in Scotland; and 'some old country money'. The last can be discounted as a source for testoons, although the overvalued base billon issues could profitably be made from old coin of silver or of better billon: indeed the 1559 propaganda against the regent's rule made the point that her ministers 'spare not plainly to break down and convert the good and stark money, cunyeit in our sovereign's lessage, into this their corrupted scruff and baggage of Hard-heads and Non Sunts'.¹⁵ In normal times the supply of bullion to the mint by the merchants doubtless showed the same seasonal variation at this period as in the better-documented parts of the next century: for example, in 1623 no silver was coined until May, and in 1622, none between 3 February and May.¹⁶ This reflected the yearly pattern of foreign trade, with arrivals and departures of ships concentrated in May to December. But in this revolutionary year, with Leith beset by English forces and Edinburgh strongly Protestant, it would be surprising if the merchants delivered any appreciable amount of silver to the mint in late March to early June (although the castle was not besieged). Likewise it is very doubtful whether there were any French supplies of bullion then, not only because of the English fleet but also because of political and religious opposition to the Guise ascendancy in France itself, which made it impossible to continue the military effort in Scotland: the first of the French envoys reached London in April, to discuss terms.¹⁷ French supplies of silver were, however, presumably important in the second half of the previous year, when additional troops arrived. Thus it is unlikely that more than a very minor part, if any, of the 196 stone of testoons coined by Acheson in July 1559 to June 1560 could belong to the ten and a half weeks for which 1560 would have been the correct date. If any testoons were struck in those weeks, old dies might have been used.

Burns considered that the change from SCOTOR B to SCOTOR Q on the testoons marked the change of mint-master, from Acheson to Hart, in the summer of 1560.¹⁸ Even a cursory consideration of the bullion figures in the Hopetoun manuscript is enough to cast doubt on this theory,¹⁹ although the earlier type of testoon is the scarcer, but the attractive aspect of Burns's theory is that it seemed to provide an explanation of what must be considered an intentional change. As the change occurred on testoons and half-testoons alike, and also involved the crowns, it was clearly not just due to puncheons breaking. It is known from the Hopetoun manuscript that Acheson was deprived of his office after the regent's death, presumably because his loyalty to her made him unacceptable to the lords who came to power. He was not, in fact, the only mint official so treated, as other sources show. After Forrest had absented himself, Herbert Maxwell was appointed as general, and was in office from 20 January until the regent's death, after which Mary twice renewed his gift of office, 'dischargeing David Forrest and all utheris pretending ony interes before the day of the dait heirof', on

¹⁵ Knox, i. 222. The editor gives 'a thin covering' as one meaning of 'scruff' (scruff, scurf). The familiar sense of scurf is as acceptable as 'baggage' as a metaphorical pejorative description, but it is possible that Knox was referring to the thin layer of surface enrichment which was normal for billon coins.

¹⁶ From figures for journeys, in Scottish Record Office manuscript E 102/8. These are probably reasonably

typical years for the bullion brought in by merchants, since they did not involve recoinage and were after the period when the silver mine near Linlithgow made an important contribution.

¹⁷ His commission from Francis and Mary was dated 7 April. *Cal. SP Scot.* i, 344.

¹⁸ E. Burns, *The Coinage of Scotland* (Edinburgh 1887), ii. 325.

¹⁹ Murray, *op. cit.*

6 December 1560.²⁰ It is highly probable that Andrew Henderson and Mr John Balfour, who had taken over as warden and counterwarden in July 1559, would also be deprived. The same might apply to the die-sinker, James Gray, but it is not so obvious that a replacement for him would be available. If any one of these three was indeed replaced at the same time as Acheson, but restored to office later in 1560, this might well account for the change to SCOTOR Q and change of crown, and also for the reappearance (at about the same time) of puncheons which had been used on the lorraines.²¹ Certainly the warden and counterwarden were keepers of the coining irons—a term which need not have been confined to the dies²²—and might have retained some of them if deprived; and their other responsibilities were perhaps important enough to justify making a distinction on the coins, when one of these offices changed hands. Inevitably, in the absence of documentary evidence, this is speculative. We do know that Henderson, Balfour, and Gray all held the same positions in 1565 as in the autumn of 1559, but so did Forrest and Acheson, for whom we happen to know that their tenure was interrupted.²³

The question of why a new type of testoon was introduced in 1560 deserves further consideration. The assumption that the reason was Francis's accession to the French throne, although natural, does not appear to be justified. In France, in fact, the coinage continued to be in the name of his father, Henry, throughout Francis's reign, from 10 July 1559 to 5 December 1560 (and also at the beginning of his brother's reign). It is more relevant, however, to instance the only other Scottish coins dated 1560, namely hardheads: on these, the French part of the royal titles continued to read D. D. VIEN for dauphin and dauphiness of Vienne. Alteration to update this would have been much simpler than the change to the testoons, which involved the royal arms and devices as well as the inscriptions, and it is hard to believe that this change would not have been ordered too, if the regent had considered it important to mark Francis's elevation, on the Scottish coinage. In August and September of 1559, at least, there was a more favourable time to consider this than after the treaty of Berwick: November to January was another period when the government was in the ascendant, but the regent was already seriously ill by the end of November. The previous change, acknowledging Francis as king of Scotland on the testoons, had indeed been implemented with very little delay after 29 November 1558, the date when the Scottish parliament ratified the provisions of the marriage treaty, by which Francis was to receive the crown matrimonial—it would have been impolitic to anticipate the ratification—but that was a matter of much greater importance to Scotland than his accession to the French throne.

If the new type of testoon was introduced for other reasons, then of course it was only to be expected that the royal titles and arms would be updated. The new government, after the conclusion of the war, clearly had more reasons and more opportunity for a change than had the regent's government in 1560. It was, in fact, consideration of the legend *Vicit Leo de Tribu Iuda* which first led us to doubt Burns's theory that this

²⁰ RSS, v, nos. 733, 808, 815.

²¹ Murray, op. cit. and *infra*.

²² In 1663 it was the general who was authorized to deliver the puncheons for a new coinage to the die-sinker, to make dies: Cochran-Patrick, op. cit. ii. 149. The die-sinker's receipts show that he returned the puncheons to

the general when not in use: Lauderdale Mint Papers, 69/6/9, National Register of Archives (Scotland).

²³ Cochran-Patrick, op. cit. i. 85 (for 1565). Maxwell probably took over again in 1561, since it was news on 30 Jan. 1562 that David Forrest was restored to his office: *Cal. SP Scot.* i. 598.

issue was partly struck by Acheson, before he was deprived of his position as mint-master. (This was induced by a letter from Mr Ian Stewart, inquiring what we made of this legend. He was careful not to direct our thinking, although the inquiry inevitably suggested doubt about the previously accepted dating. He afterwards disclosed that he considered the legend to refer to the success of the revolution.²⁴) At no time in 1560 could this legend be appropriate to the situation of the pro-French Catholic government, although this did not prevent the *continuation* of the use of the legend *Vicit Veritas* on the hardheads, which began in 1555. But the protestants, who believed their cause alone to be the true godly one, had prevailed (with English help). Moreover, the continuation of the quotation, which in the Authorised Version reads 'the lion of the tribe of Juda . . . hath prevailed to open the book',²⁵ was particularly relevant, in view of the reformers' emphasis on the availability of the Bible in the vernacular and the use of the vulgar tongue in church services. The type of the *Vicit Leo* testoons is, of course, traditional, unlike that of the intended coinage of the lords of the congregation in November 1559, but an innovation like that might have been offensive to those of a more conservative stance, who had joined the insurgents later. The new government could hardly do other than acknowledge the sovereigns' titles on the coinage, since the Scots had declared in the treaty of Berwick that they did not intend 'to withdrawe any deu obedience from their Soverane Ladye the Queyn, nor in any lefull thing to withstand the French king, being her husband'.²⁶

One may also argue that the new government had good reason to discontinue the striking of lorraines, as being particularly associated by their common name with their late adversary, Mary of Guise, of the house of Lorraine. The disappearance of the Lorraine crosses and the reappearance of the Scottish thistle and saltire would probably please even the illiterate but the legend *Fecit Utraque Unum* on the lorraines would perhaps be the most offensive feature to those who understood it—He (God) has made both (the kingdoms) one. The Scottish parliament had granted Francis the crown matrimonial for the duration of the marriage only and had maintained the position of the duke of Chatelherault as heir presumptive, but there was a justifiable fear of Scotland being permanently incorporated in the kingdom of France. Before the marriage, the young queen had herself signed secret documents bequeathing her realm to the French king. By virtue of the marriage treaty, containing the provision of mutual naturalization, which had been ratified, it could perhaps be claimed that the kingdoms were already one, but of course this had not made any more acceptable to the Scots the regent's use of Frenchmen in her administration, nor the growing numbers of French troops, with their wives and families, 'comin in and sutin down in this realm to occupy it and to put furth the inhabitantis tharoff', as was claimed.

²⁴ About Easter, 1974. He mentioned the use of this legend on thalers of the abbess of Herford in Westphalia. An earlier use was on *giulios* of Pope Leo X, 1513–21, struck at Ancona. Mr Stewart has recently made the point that two German usages of this coin-motto had a heraldic lion as the type—the Bohemian lion on the thaler of Breslau, 1543–52, and the crowned lion of Limburg on the Herford coins, 1545–52, of Abbess Anna of Limburg; and that 'this coin-motto, recently used with reference to heraldic lions, could have been welcomed as a means of alluding to the emancipation of the Scottish lion from

French rule' (Spink's *Numismatic Circular* (1981), 160). Even if the allusion primarily intended in this motto was to the religious side of the success of the Protestant cause, as here taken to be the case, the precedents adduced by Mr Stewart certainly strengthen the case for the lion to be considered as also symbolizing Scotland.

²⁵ Revelation 5: 5.

²⁶ T. Rymer, *Foedera*, xv. 597, and quoted in *A Source Book of Scottish History*, ii. 171, ed. W. C. Dickinson, G. Donaldson, and I. A. Milne.

The Hopetoun manuscript gives two special sources of bullion, which explain the unusually large mintage in Hart's year or so as master. One was refining the base English coins, for which the Scottish price may have been more attractive than that of Elizabeth's recoinage. The other was 'Jowellis of the kirk'—the gaps in the printed version can confidently be filled in, with a fragment of the word 'kirk' being visible in both places in the manuscript, and the context confirms this—'gylt challices and uther Jowellis'. In the case of Edinburgh, this disposal was by a decision of the town council, and the money from the sale or coining of silver work from St. Giles church was to be spent particularly on 'reparation and decoring of the kirk'. This was 'silver wark pertenying to the gude toun', presumably as corporate founder and patron of the collegiate church. The quantity of 'Jowellis of the Kirk' sold to John Hart was 2 st. 6 lb. 13 oz. of silver and 5½ oz. of gold.²⁷

An Enigmatic Testoon

A remarkable and possibly unique testoon of this issue, dated 1560, turned up in the 'Dundee' sale.²⁸ This has the legends *FRAN ET MA DEI G R R SCOTOR D D VIEN* and *VICIT LEO DE TRIBU IUDA* (Pl. I, 1). The obverse legend is exactly the same as that found on the testoons of 1558–9 (lorraines), when Francis and Mary were King and Queen of Scotland and Dauphin and Dauphiness of Vienne (Pl. I, 2). But whereas the lorraines have the arms of the Dauphiné and of Scotland, which (like their legend) were correct at the time of issue, this testoon has the arms of France and Scotland, the obverse being essentially correct for the 1560 issue, apart from the legend. The reverse is the usual one for the testoons issued in 1560–1.

Not unreasonably, the cataloguer described the testoon as 'probably a transitional issue', and such a description at first sight does seem to fit. Apart from the obverse legend, the punches for the monogram and crown above it are the same as those used for the lorraines, and the lion, which has a short tail curling outwards, also occurs on the lorraines. The close relationship the testoon has to the lorraine issue is thus undeniable.

Some other features should also be noted. A tiny *lis* has been inserted after *VIEN*, a detail not seen on any other testoon. On both sides of the coin the initial-mark is a cross potent instead of the normal plain cross, and there is a similar cross above each of the small crowns on either side of the monogram. The testoon has been stamped with the crowned thistle countermark which authenticated the silver coins of this period as well as raising their value, in accordance with a proclamation of July 1578.²⁹ At 84.3 gr (5.46 g) the weight is low for an issue where the standard was 94.2 gr (6.10 g), but there is no need to condemn the coin on this account.

Reverses with crosses potent above the small crowns and as initial-marks are found, though rarely, on both *SCOTOR B* and *SCOTOR Q* testoons. These sometimes have this type of cross as initial-mark on the obverse as well. For these reasons it is believed that they should be considered as coming between the substantive issues of each variety.³⁰

If the testoon under discussion is transitional between the issues of 1558–9 and

²⁷ *Extracts from the Records of the Burgh of Edinburgh* iii, 1557–1571 (Scottish Burgh Records Soc. 4, 1875); Edinburgh Records: *The Burgh Accounts*, ii (1899), 91.

19 Feb. 1976, lot 187.

²⁹ Cochran-Patrick, *op. cit.* i. 146.

³⁰ Murray, *op. cit.*

²⁸ Bowers and Ruddy Galleries, Inc., Los Angeles.

1560–1, it might be expected to have a closer relationship to the SCOTOR B testoons than to the SCOTOR Q issue which followed them. While it is true that the monogram, crown, and lion are the same as those on the lorraines and certain SCOTOR B testoons, these identical features also occur on SCOTOR Q testoons with crosses potent above the small crowns, the same punches again having been utilized. Furthermore, the crown above the arms and the letter L are unmistakably those found only on the later issue (Pl. I, 3). There are thus good grounds for linking our enigmatic testoon with the SCOTOR Q issue rather than with the earlier one.

There seem to be two possibilities open to us. Either the die was made for some special and unknown purpose or else the die-sinker inadvertently punched the wrong legend on the die. When we bear in mind the low standard of die-sinking at the Scottish mint, the latter is by no means improbable. Some examples of the die-sinker's want of proper care in the preparation of dies are given in the immediately following paper. Even so, one would expect the most careless workman to notice such a major error and discard the die, except for the circumstance that the lions (hardheads), up to the end of their issue in July 1560, continued to give Francis and Mary the titles of Dauphin and Dauphiness, although Francis had become king of France in July 1559 on the death of his father. The die-sinker would thus be accustomed to inscribing a legend that had been out of date since July 1559 and might overlook the fact that he was inscribing it on the wrong coin. The insertion of a lis after VIEN can also be explained as negligence, the die-sinker having used the lis punch instead of that for a stop.

The Scottish Testoons Dated 1565

These extremely rare testoons have long puzzled numismatists (Pl. I, 4). They are identical to the testoons issued in 1560–1 which have the SCOTOR Q legend (Pl. I, 3). Since Francis had died in December 1560, the obverse legend was wholly inappropriate for coins struck in 1565. This legend was of course equally inappropriate on the somewhat rare testoons issued in 1561, but few of them can have been struck in that year, for they were soon replaced by the much-admired testoons with a fine portrait of Mary. These have Mary's name only on the obverse. If an issue of testoons was required in 1565, why, numismatists ask, did the authorities not order a further issue of the portrait testoons?

The only specimen of the 1565 testoon available for us to study is the one listed in Richardson's *Catalogue of the Scottish Coins in the National Museum, Edinburgh*, no. 207. There was another specimen in the Ferguson sale at Sotheby's on 14/15 July 1851, where it formed part of lot 181. A specimen which was possibly the same coin as the last was in the catalogue of the 'Nobleman' (Lord Hastings) sale, lot 616. This sale took place at Sotheby's on 15 November 1880. The testoon was said to be from the Addison collection (Sotheby's, 3 December 1855), but no such coin is mentioned in the catalogue for that sale, so perhaps the provenance is faulty. No other specimens have been traced.

Burns accounts for these anomalous coins by suggesting that some old dies of Francis and Mary were used, with the date altered, for a small coinage in 1565, probably while dies were being made for the issues of Mary and Henry.³¹ Such an

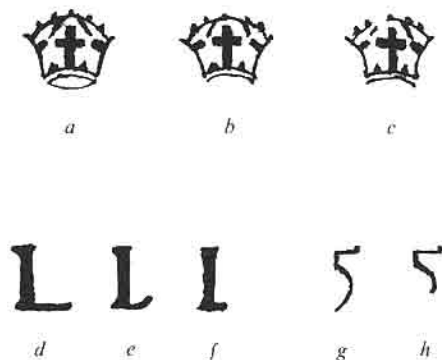
³¹ Burns, *op. cit.* ii. 324.

explanation is not really satisfactory. There is no indication on Richardson 207 that the final digit has been struck over another one, and there is no mention in the Hopetoun manuscript of any testoons being struck in 1565, although this is not conclusive evidence that none was struck. The Hopetoun manuscript does tell us, however, that from 1562 until 18 December 1565 nothing was coined, because the price of an ounce of silver had been reduced from 24*s.* to 22*s.*, as a consequence of which no one would bring any bullion to the mint. When the price was later raised to 28*s.* plenty of silver once more became available and 'fra the said day', that is, from 18 December 1565, the minting of 30*s.*, 20*s.* and 10*s.* pieces began, no less than 2196 stone being struck up to the end of March 1572.

How, then, are we to fit these pieces into the Scottish coinage? The most probable explanation must be that they were struck, not in 1565, but in 1560, when the die-sinker, with his customary ineptitude, punched a 5 as the final digit instead of a 0.

It is of some interest that a testoon in our collection has the 0 of the date punched over an inverted 5. This example of carelessness shows that the die-sinker had made the elementary mistake of failing to check that he was employing the right punch before applying it to the die. As the punch for the 0 (which he thought he was using), unlike that for the 5, could be positioned either way up, the user presumably felt no need to verify that the figure was not inverted. On this occasion the error was noticed and corrected. The final digit of the 1565 testoon appears to have been an unnoticed punching error. Another such blunder is to be found on a VICIT LEO testoon of 1560 in the British Museum, which has DD for DE on the reverse.

Examination of the reverse of the 1565 testoon confirms Burns's suggestion that the dies were made in 1560, for it has various distinctive features found on other coins of the same issue. These are:



1. On the small number of early dies for the SCOTOR Q issue on which the crowns above the lis and thistle are surmounted by a cross potent or, in very rare cases, by a plain cross, the crown's interior shows like an ellipse. The cross soon disappears, however, so the crown then resembles *a* in the figure. On later dies the bottom of the crown punch has broken off (*b*), and finally, part of the crown's arch has also broken away (*c*). Richardson 207 has crowns similar to *a*.

2. On the earliest dies the letter L has a long horizontal stroke (*d*). This is replaced with an L having a shorter stroke (*e*). On the latest dies the serif has broken off, so the letter more resembles an I than an L (*f*). R. 207 has the earliest type of L.

3. Early dies have a 5 that is unbroken (*g*). Later dies have a broken 5 (*h*). On R. 207 the 5 is unbroken.

The obverse of R. 207 also dates from 1560 because it is from the same die as a testoon of that year in the British Museum. While Burns's contention that the dies are old ones is therefore fully vindicated, the same cannot be said for the claim that the testoons were struck in 1565.

Misdating errors are not unknown in the Scottish coinage. A two-thirds James VI ryal (sword dollar) exists dated 1561.³² Coins of this issue were minted in 1567–71, so 1561 is clearly an impossible date. Another coin of James VI is a ten shillings of 1564 instead of, presumably, 1594.³³ In other cases the die-sinker has omitted part of the design. One such coin was described in Spink's *Numismatic Circular* for April 1966, p. 94; this was a two-thirds Mary ryal on which the date had been accidentally left out. On a Mary testoon of 1560, of the same coinage as R. 207, the small crowns above the lis and thistle have been omitted.³⁴ An exactly similar defect can be found on the obverse of a two-thirds ryal of 1571, where the small crowns above the I and R have been omitted.³⁵ With examples like these it is easy to comprehend why a wrongly dated coin of 1560 was allowed to pass into circulation.

Grateful thanks are due to Mr A. Fenton, Director of the National Museum of Antiquities of Scotland, for permission to discuss and illustrate R. 207. The enlarged photographs were kindly supplied by the museum.

³² R. C. Lockett sale, Glendining's, 26 Oct. 1960, lot 927.

Also in British Museum.

³³ Scott-Plummer sale, Sotheby's, 9 Dec. 1929, lot 379.

³⁴ 'Dundee' sale, op. cit. lot 193.

³⁵ Murray collection.



Obv 1



Rev 1



Obv 2



Rev 2



Obv 3



Rev 3



4 (x2)



4 (x2)

MURRAY: TESTOONS

THE SOVEREIGN REMEDY: TOUCH-PIECES AND THE KING'S EVIL

PART II

NOEL WOOLF

The Silver Touch-Piece—James II—Made in France

WHEN James II landed in France on Christmas Day 1688 we begin the story of the silver Touch-Piece; a story that was to continue for another 119 years. From that moment James became no more than a pensioner of the French king, dependent on him for everything from the loan of a palace at St Germain to the support of his greatly reduced court of penurious exiles. But because he could no longer afford gold for his Touch-Pieces that was no reason to abandon one of the last rites of royalty left to him. He would make do with silver.

Unfortunately we lack the documentary evidence that could tell us when the new Touch-Pieces were ordered, who made them, and how many. There is information to be found in the Stuart Papers concerning patterns for new coins, but no mention is made of Touch-Pieces or Touching. The old angel had been a coin with a currency value; its status as an amulet was additional. The English Touch-Piece, though not a coin, had continued to be gold and to be made under the same conditions at the Royal Mint and subject to the same accounting system. These new French-made pieces were something less than coin, and little better than medalets. They were probably not considered worthy of mention, especially as their intrinsic value had been reduced from 5s. to 3½d.

From the accounts of his flight it hardly seems likely that James could have taken any gold Touch-Pieces with him; and there is nothing to tell us how he came by any of the new pieces except conjecture guided largely by a process of elimination. The new pieces could hardly have been made by John or Norbert Roettiers who were both still in London working at the Royal Mint. It was of course John, probably assisted by his son in later years, who had made all the gold Touch-Pieces since 1664. John and his family had been brought to England by Charles II at the Restoration to work as engravers, and the Roettiers' loyalty to the Stuarts was enduring. The most likely candidate to be the maker of the new pieces must be John's brother Joseph who had worked in London and was now Engraver General to the French mint.

It may seem strange that James should Touch at all on French soil, where it was the prerogative of the French king to do so. But Louis XIV was another monarch who believed in the Divine Right, and in his eyes James's powers of healing among his own expatriates would not have been reduced because of his misfortunes. Louis showed the greatest tolerance of his English cousin, so much so that he even raised no objection to the kingship of France being included among James's royal titles on the new Touch-Pieces made in the French mint.

The first thing that strikes us about the new Touch-Pieces is the design of the ship (Pl. II, 1). Gone is the *Sovereign of the Seas* seen in elevation, and instead we have a still more realistic representation of a ship sailing away from left to right (JII O1 see Appendix G). This is *The Prince*, a vessel of 100 guns built in 1670 (Pl. II, 8). It was appropriate to use this ship as she had been James's flag-ship when, as Duke of York and Lord High Admiral, he commanded at the battle of Sole Bay in 1672. Her three lanterns and the decoration on the stern, including the royal arms can all be identified. The shape of her quarter gallery is also distinctive.¹

But was this change of design entirely the work of Joseph?

In the Royal Mint museum there is an unfinished puncheon for a ship (Hocking 108) listed as having been intended for a Touch-Piece (Pl. II, 6). It shows the stern view of a ship under full sail. Comparison with the ship that appears on John Roettiers's medal commemorating the Peace of Breda in 1667 (MI 535/185-6) (Pl. II, 7), and another on his Naval Reward medal of 1665 (MI 503/139-40) suggests this unfinished puncheon could have been his work also. If this were an experiment by John, or even Norbert whose work was very similar, and if it were abandoned because of damage or because it was considered unsuccessful, it could at least suggest that the engraver's mind was working towards a new design.

The fact that an English ship has been used as the model, and has been so accurately represented, does, however, suggest that the design may have been supplied to Joseph from across the Channel.

There is every indication that the puncheons for the ship used for JII O1 and O2 were both made in France (Pl. II, 2). Had they been made in England by John or Norbert they would have carried all the detail of the design—the hull, masts, spars, sails, even the flags and the water. Only the finer rigging lines would have been left to be engraved directly on the dies. That the puncheon for the new ship used for JII O2 was clearly limited to the hull is apparent as it is among the Roettier puncheons and dies presented by Matthew Young to the British Museum in 1828.² The same puncheon can be shown to have been used later for both the French-made Touch-Pieces of James's son. On all the dies made from this puncheon everything above and below the hull of the ship was individually engraved on them, and varies from die to die.³ The same considerations apply to JII O1, but a different puncheon was used for the hull of that ship. On the French-made silver pieces another important difference is that the sails are indicated by no more than a couple of curved lines, while the English engravers of the gold pieces had subtly modelled them.

The same ship is also featured in Norbert Roettiers's medal of the young Prince James struck in 1697 (MI 192/500) (Pl. II, 9). Norbert had left England in 1695 and was by then working at the Paris mint. The royal arms have been left off the stern but all the other details are repeated. The medal is larger than the Touch-

¹ The aid of the National Maritime Museum in identifying the ship is acknowledged. The illustration is of the builder's original model now in the Science Museum, London.

² Miss Farquhar described this puncheon as 'unfinished' ('Royal Charities', *BNJ* xv (1922), 164-5). Evidently she was unaware of the differing techniques used by members of the Roettier family working in

London and Paris. There is also some inconsistency in stating that it was both unfinished and used for the die of the IAC 8 Touch-Piece.

³ A description of the Roettiers's technique used on the Continent is given in J. Bingen, *Les Roettiers Graveurs en Medaille de Pays-Bas Meridionaux* (Brussels, 1952), pp. 51-3.

Piece and consequently the rigging is able to be more detailed. The workmanship is much finer.

Unlike the ship the figures of St. Michael and the dragon are very close replicas of those that appeared on James's gold pieces. Indeed they are so close that one is tempted to wonder whether the puncheon could have been the work of John or Norbert. The latter is supposed to have left the mint over-hastily in 1695 and fled to France: reputedly he had abstracted some of his work, possibly for the benefit of the exiled James. Joseph, then, faced with the task of making Touch-Pieces to a traditional design on James's arrival in France in 1689, quite likely sought guidance from his English relatives.

The only evidence we have concerning James's use of the silver Touch-Pieces and his exercise of the Royal Touch while in exile derives from two meagre references, and a recorded Touching.

The Age of Louis XIV

Voltaire describes James's arrival in France, and Louis's reception of him, his wife, and the infant prince. He continues: 'Amid the humiliations of this fugitive king and the generosity of Louis XIV, it was a noteworthy sight to see James touching the scrofulous at the little English convent; perhaps the English kings claim this singular prerogative as pretenders to the throne of France, or else the ceremony has been established since the time of the first Edward.'⁴

The temptation should be resisted to extract too much information from this short passage. Admittedly it immediately precedes Voltaire's account of James leaving for Ireland; and while James may have Touched, and may have used Touch-Pieces, so soon after his arrival in France, it hardly constitutes proof. Voltaire's book was not published until 1751, though it had been started about 1730, and that was some forty years after these events. There can be no certainty that the sequence of events was accurately recorded.

It is of course possible that James may have Touched during the six weeks between his landing in France and his departure for Ireland without the use of any Touch-Pieces. In fact, if Voltaire actually witnessed the Royal Touch being bestowed, as could be implied from his account, and if a Touch-Piece had been hung around a sufferer's neck, it would have been surprising if Voltaire had not described the act in some detail. The French kings did not use Touch-Pieces, and Voltaire would surely have been sufficiently intrigued and impressed by the English practice to have expressed his own cynical views.

The second reference is to be found in *Numismata Antiqua in tres partes* (1746), which illustrates a silver Touch-Piece described as 'The Healing Piece of K. James 2 struck in silver in Ireland' (Pl. II, 3). But without further support this statement should not really be taken to mean more than 'believed to have been struck in silver for use in Ireland'. Certainly the drawing is too imprecise for the illustration to help us to decide which of the two Touch-Pieces it might have been intended to represent.

The recorded Touching concerns a child of five-and-half.⁵ Maria Windfreda

⁴ Voltaire, *The Age of Louis XIV* (trans. Pollack, 1961), p. 141.

⁵ A Catholic Gentleman, *Life of Sir Edward Widdrington* (1923), p. 25.

Francesca, daughter of Sir Nicholas Shireburn and his wife Catherine, was sent to the exiled Court at St Germain-en-laye 'to be tutched for ye King's Evil by King James ye 2nd 8th May 1698'. A member of an ardent Jacobite family, descended on her mother's side from Sir Edward Widdrington, Maria later married the eighth Duke of Norfolk.

The campaign in Ireland was well documented and had there been any Touchings there it seems unlikely they would have escaped mention. None have been found. It does, however, seem reasonable to suppose that James may have had some Touch-Pieces, whether made there or in France. Miss Farquhar, noting that JII O1/R1 was by far the rarer of the two silver pieces, put forward the theory that the dies and the puncheons were taken to Ireland, where the strikings were made, and were left behind when James fled after the battle of the Boyne.⁶

Whether the dies were lost or only damaged, there seems to be no doubt that they must have become unusable or unavailable at an early date, and have been replaced by JII O2/R2. That the puncheon for the hull of the ship also became unusable is also obvious from its replacement by a new one which continued to be used for as long as Touch-Pieces continued to be made in France by a member of the Roettier family.

There is reason to believe that the puncheon for the reverse was not lost or damaged. A remarkably complete identity of the lines on R1 and R2 can be observed if enlarged photographic transparencies are made and superimposed. There are four places where differences occur: the feather pattern on the right wing, the dragon's tongue, its two teeth, and the barbed tip to its tail. All are slight and could perhaps be accounted for by tooling on a die. Obviously, if this tooling did take place, it must have been on R1 as it does not appear on the later dies made from the same puncheon for James III.

Members of the Roettier family were in the habit of regarding all dies and puncheons, other than those made for coins, as being their personal property. This is apparent from the correspondence in 1728 between James III and Norbert's widow concerning the ownership of the engraver's dies and puncheons, which we know must have included some of his uncle Joseph's work.⁷ This offers further support to the idea that if Joseph did send any dies for striking in Ireland he retained the puncheons from which they were made in his own keeping.

The Silver Touch-Piece—James III—Made in France

The only information we have that James III exercised the Royal Touch on French soil comes from Blount's *Annotated Book of Common Prayer* (1866) in which it is stated that '... power of touching was exercised by the son of James II as James III in the hospitals of Paris'. We know that two Touch-Pieces were made for him while he was in France (Pl. II, 4, 5). Miss Farquhar considered that the one with his English title was probably made about 1708 because in May of that year Norbert Roettier had been directed to prepare puncheons and dies for an English coinage; and that the one with the Scottish title was as probably made in 1715 at the time when puncheons and dies for a Scottish coinage were ordered.⁸

James landed at Peterhead on 22 December 1715. On his way from there to Perth he spent two nights, 4 and 5 January, as the guest of Lord Strathmore at Glamis Castle.

⁶ H. Farquhar, 'Royal Charities', *BNJ* xiv (1922), 116.

⁸ H. Farquhar, 'Royal Charities', *BNJ* xv (1922),

⁷ H. Farquhar, 'Concerning some Roettiers Dies', *NC* 162 ff.
4th ser. xvii, 158-9.

Thomas Hearne, writing in his diary nearly a year later, recorded that Strathmore had just told him that 'the king touched many for the evil in his lordship's house and that they recovered'. It is reasonable to infer from this that James had with him some Touch-Pieces, and even that they were in all probability of the Scottish type. It would be interesting to know how many were regarded by Strathmore as 'many'. This, the only record of James's Touching in Scotland, gives some support to Miss Farquhar's dating.

But is it likely that James would have waited seven years after his father's death before having Touch-Pieces of his own struck? One of them at least is likely to have been made earlier than 1708. But when we place the two side by side we find that they are so exactly alike in workmanship that it is hard to imagine they were not made at the same time. We even find the same letter punches being used on both obverses (Pl. II, 10, 11). Two of them were damaged and the faults are apparent on both pieces, and all the others can be shown to match when enlarged photographically. That some of them can be found to have been used on JII O2 shows they were among the letter punches belonging to Joseph, and because all of them were not used on that die it is clear there must have been alternative characters in the same fount that could have been selected for use.

By a warrant dated 9 November 1695 James II appointed 'Joseph and Norbert Roettier to be makers of all instruments, tools, and engines fit and necessary for edging and milling all sorts of gold and silver to be coined in the Mint for the Kingdom of England in such manner as they shall be from time to time ordered.' And by another warrant of the same date John and his sons James and Norbert were appointed to be Engravers General to the Mint for the Kingdom of England. Both these warrants were renewed by his son James III on 6 June 1703. It is therefore clear that Joseph was still working for the young king shortly before his death in September 1703, at the age of 71. John died in London, also in 1703, and James had died in 1698, so that after Joseph's death Norbert was left to work on his own. Both IAC3 and IAC8 are clearly copied from JII O2/R2 but the workmanship is very inferior. The flags are void and faceless, and the billows of the sails are somewhat angular with their curves lacking sureness. One must hesitate to attribute them to Norbert, whose work they would have had to be if they had been made as late as 1708. It seems more likely they were the work of Joseph in the last months of his life, copying his earlier pieces, with failing eyesight and a less than steady hand. This of course cannot be claimed as more than a theory, but for what it is worth it is put forward.

The same inferior workmanship is noticeable on the reverse die used for both IAC3 and IAC8. The figures of St. Michael and the dragon are satisfactory because the earlier puncheon used for JII R2 has been used again; although even here there is a deficiency: the cross at the top of the lance has been left as a straight line instead of having its ends broadened out on the die to form a cross patee as was done on both dies made for James II. The letters of the word 'Gloria' have been weakly sunk, and this applies also to some of the letters on the obverse. It is not reasonable to suppose any of this could be the work of Norbert Roettier who was then only about 40 and had another twenty years work left in him.

James departed from tradition in having a Touch-Piece struck with his Scottish title, and one must wonder why he did it. Any Touching he might have done in Scotland

would have been as King of England. Ian Stewart makes this same point in connection with Briot's angel which exhibits the English arms and not the Scottish.⁹

The Silver Touch Piece—James III—Made in Italy

After the failure of the '15 the British Government made it clear they could no longer tolerate the presence of James on French soil. The Regent had little choice; France needed peace, her Exchequer was empty, and James, no longer an asset but a liability, was soon on his way to the Papal city of Avignon, where he arrived on 2 April 1716.

It was to James at Avignon that one Christopher Lovel went to receive the Royal Touch; and Thomas Carte in his *History of England* gave a very full account of his case. Lovel was a labourer living in the City of Bristol, and had been afflicted for many years with scrofulous sores on his breast, neck, and arms. The tumour on one side of his neck was of such a size that it 'forced him to keep his head always awry'. At the end of August 1716 an uncle, who had been a seaman, took Lovel 'to Cork in Ireland, where he put him on board a ship that was bound to St Martin's in the Isle of Re. From there Christopher made his way first to Paris, and thence to the place where he was touched, in the beginning of November following, by the lineal descendant of a race of kings, who had indeed, for a long succession of ages, cured that distemper by the royal touch.' Carte goes on to observe 'But this descendant, and next heir of their blood had not, at least at that time, been crowned or *anointed*. The usual effect however followed: From the moment that the man was touched and invested with the narrow ruband to which a small piece of silver was pendant, according to the rites prescribed in the office appointed by the church for that solemnity, the tumour dispersed insensibly . . .' and ' . . . he arrived in perfect health, in the beginning of January following, at Bristol, having spent only four months and some few days in his voyage.' Carte's *History* was published in 1747 and he used the story to show that such cures 'could not possibly be ascribed to the regal unction'. In his view at least there had been no coronation at Perth in 1715. He overlooked the fact that James II had Touched a month before his coronation, and Charles II for several years before being crowned as King of England; although he had been crowned King of Scotland.

James III was not to remain long at Avignon. Fear of a Catholic succession was still an important weapon against James, and the closer he could be identified with Rome the better for the British Government. Diplomatic pressure and the threat of a naval bombardment of Civita Vecchia had the desired effect, and on 6 February 1717, with his suite of some seventy persons, James left Avignon and made his painful and slow way across the Alps to Italy. The Pope offered him a palace at Urbino. Later, after his marriage in 1719, he set up his court in Rome at the Palazzo Muti, and for the rest of his life, almost half a century, that was his home.

James's Italian Touch-Pieces are the most common of all those used by the Stuarts in exile, and during those years in Rome he must have Touched quite a number of sufferers. There are, however, very few occasions recorded.

A pamphlet dated 21 August 1721 and written in the form of a 'letter from a gentleman at Rome to his Friend in London' refers to healings by the 'Rev Father Lewis, S.J'. This may have been a code name for James III, as the writer gives an account of the

⁹ I. H. Stewart, 'Some Scottish Ceremonial Coins', *Proc. Soc. Antiq. Scotland*, xcvi (Sessions 1964-5), 220-5.

history of Touching for the King's Evil and regrets that it is no longer practised in England.

The following year, in July, James's consort, Clementina, went to the Baths at Lucca for her health. James followed at the beginning of August, and the couple did not return to Rome until the end of September. James Touched at Lucca each Thursday, and a description of the ceremony is to be found in the Archives.¹⁰

The King knelt on a cushion, and the other assistants, including the children of both sexes who were to be touched, on the ground. The King's Confessor, an Irish Dominican . . . wearing cotta and stole, recited certain prayers, to which His Majesty responded. The priest then read the Gospel of Christ's ordering his disciples to go and teach all nations, and when he came to the words 'Super egros manus imponent et bene habebunt', one of the King's aides-de-camp led the children one by one to His Majesty, who was now seated, and who laid his hand upon each, the priest meanwhile repeating 'Super egros, etc.'. The King then knelt and recited certain prayers, after which, resuming his seat, he hung a silver medal, bearing St Edward on one side and three ships on the other, round the neck of each child. The King performed the ceremony in a saintly manner, with great devoutness and recollection of mind.

How many people were Touched and whether they were only children is not made clear. The description of the Touch-Piece need not be taken literally: the 'three ships' is obviously intended for 'a three-masted ship', and it would not be unreasonable for anyone believing that the power originated from Edward the Confessor to imagine that the figure of St. Michael was intended for that sainted king.

Out of touch with Roettier in Paris, James turned to the Hamerani brothers, Ermenegildo and Ottone, at the mint in Rome. It is frequently assumed that all James's medallic work was done by Ottone, but both the brothers engraved medals for him and it is impossible to say which of them may have been responsible for the new Touch-Pieces. By a warrant dated 25 October 1720 Ottone was appointed to be engraver to James, but by then he had been in Rome for four years, and even if he had taken a supply of Roettier's Touch-Pieces with him it is likely he would have required more before then.

Hamerani—whichever brother it may have been—adapted the Roettier design, making important changes in the detail. On the obverse (Pl. III, 12 ff.) the ship still sails from left to right, but the wind has changed and she no longer has a following breeze. It was not appreciated, however, that this would have necessitated a change in the set of the sails, and the ship now has an awkward look about it. Perhaps this change of wind was intended to be a comment on James's change of fortune? On the reverse (Pl. IV, 24 ff.) a more vigorous St. Michael is more actively engaged in slaying his dragon, and the beast's head now lies to the left instead of to the right; it also appears to have lost its legs. On both obverse and reverse the relief has been deepened.

Four obverse and five reverse dies are noted (see Appendix I). Two Touch-Pieces, both from the same pair of dies, are known in gold. As James could not afford to use this metal for distribution we can assume that they were specimen pieces from the first pair of dies, and these have accordingly been labelled JIII O1/R1 (Pl. III, 12; Pl. IV, 24). The lack of a space in the obverse legend to show where the piece may be safely pierced could also point in the same direction. The other three obverses all have varying spaces. Generally these spaces do not appear to have been used with any degree

¹⁰ F. Acton, 'The Archives of Lucca Doc N.VI', quoted by M. Haile in *James Francis Edward, the Old Chevalier* (1907), p. 290.

of accuracy; but as all the reverses have the angel's head further from the edge than the French-made pieces it usually escapes mutilation.

Apart from JIII O2 (Pl. III, 13), which is associated with two reverses, JIII R2 and JIII R3 (Pl. IV, 25, 26), the pairing of dies appears to be constant. The leg flaw on R2 does not give the impression of resulting from a cracked die as it is invariably incuse on the struck pieces. So far no piece has been identified as coming from that die without the flaw. JIII R5 (Pl. IV, 28) was later used for one of Charles III's Touch-Pieces.

All the ships vary slightly in their dimensions, and all the angels have slight variations in the spread of their wings, and in some cases in the thickness of the left knee. R1 has a different type of feather pattern to the others. These differences are mostly very small and only become explicit when the pieces are magnified some eight or ten times and their images superimposed.

The Roettiers's Touch-Pieces were reasonably close to a standard of weight—a mean of 22.7 gr. The standard deviation of nineteen silver Touch-Pieces made by Joseph and Norbert for James II and his son was 1.4 gr. By contrast, the Italian-made pieces vary widely in weight: the mean of twenty-four specimens being 51.6 gr, with a standard deviation of 8.8 gr. The lightest weighed 35.5 gr and the heaviest 74.5 gr.

Until now only two obverse and three reverse dies have been recognized for these Touch-Pieces and they have been classified as Light and Heavy types. However, out of the five types now identified none are to be found exclusively at one end or the other of the weight range. It must have been entirely fortuitous whether a thick or a thin flan was used. As an example two specimens from the same pair of dies, JIII O2/R2, have shown a difference in weight of more than 20 gr.

It seems most probable that the central design was engraved directly on the dies in intaglio, and that puncheons were not made. Had puncheons been made one could reasonably expect to find at least one of them being used on more than one die. Such evidence has not been found.

Ermenegildo Hamerani died in 1744, his brother, Ottone, early in 1761. By a warrant dated 16 May 1761 James appointed his son Fernando to be engraver in Ottone's place, but there is nothing to show whether he did any work at all for James during the last five years of his life.¹¹

Charles III

The first Stuart king of England cast the first doubt on the royal power of healing by directing the supplicants' faith away from his own hands back to those of the Deity. His great-great-grandson carried the decline of the Royal Touch a stage further by practising it vicariously on behalf of his father.

On 17 September 1745 Prince Charles Edward entered Edinburgh and occupied Holyrood House. His father was proclaimed King James VIII at the Cross, and in the evening there was a state ball. It was thirty years since a royal Stuart had set foot on Scottish soil, and over sixty since one had been in Scotland's capital.

¹¹ Forrer omitted Fernando Hamerani, son of Ottone, thus making Gioacchino Ottone's son instead of his grandson. He was also unaware that Gioacchino had

a younger brother Giovanni who became Incisore Camerale on his brother's death.

The prince stayed for five weeks at Holyrood, and there is an account of his Touching a seven-year-old girl who was brought to him there.¹² The prince

was found in the Picture Gallery, which served as his ordinary audience chamber, surrounded by all his principal officers and by many ladies. He caused a circle to be cleared, within which the child was admitted together with her attendant and a priest in his canonicals. The patient was then stripped naked, and placed upon her knees in the centre of the circle. The clergyman having pronounced an appropriate prayer . . . Charles approached the kneeling girl, and, with great apparent solemnity, touched the sores occasioned by the disease, pronouncing at every different application the words 'I touch, but God heal'. The ceremony was concluded by another prayer from the priest, and the patient, being again dressed, was carried round the circle and presented with little sums of money by all present.

It is noteworthy that Charles used the French form of words and not the English: 'They shall lay their hands on the sick, and they shall recover.' His father habitually used the office of Henry VII to which James II had reverted in 1686. Charles's form of words may have been in recognition of the fact that he was only a deputy. The account is sufficiently detailed for us to expect mention to have been made of a Touch-Piece being put round the girl's neck if one had been used.

When James III died in 1766 at the age of 78 neither of his sons was present, and he had not seen Charles for twenty-two years. Charles's movements, as he had wandered about Europe, had been, and continued to be, kept under surveillance by Sir Horace Mann, the British minister in Florence. Late in August 1770 Charles went to Pisa for the waters, and on 8 September Mann reported that he was 'still at the Baths at Pisa, from which it is said he finds great benefit. He lives exactly in the same manner as he did here; but I must not omit that two or three very low people have applied to him, to be touched for scrofulous disorders, which ceremony he performed.'¹³

The next time Mann reported any Touching was on 8 August 1786; 'The Pretender with his family has retired to Albano. He has lately assumed the folly practised by his father and grandfather to touch people who are afflicted with scrofulous disorders; many old women and children have been presented to him for that purpose, to whom, after some ceremony, he gives a small silver medal, which they wear about their necks.' It would be wrong to assume that these were the only occasions on which Charles Touched. But Mann's surveillance was pretty thorough, at least after James's death when the new king had settled in Italy, and the rarity of his Touch-Pieces certainly indicates that the number of people who sought healing from Charles III must have been quite small.

Charles's Touch-Pieces follow the same pattern as his father's. A new die CIII O1 was of course needed for the obverse (Pl. III, 16) and was presumably the work of Fernando. The existing reverse die, JIII R5, was still usable and now becomes CIII R1 (Pl. IV, 29). Specimens from this pair of dies are rare, and both those seen have been pierced conventionally above the Angel's head. A second pair of dies, CIII O2/R2 (Pl. III, 18; Pl. IV, 30), was made later, and Touch-Pieces from these dies are commoner. They all show the same flaws: on the obverse there is a pellet, almost central, on the shrouds, and there are two more beneath the reefed main-sail. On the reverse a flaw links the S of SOLI to the angel's right ankle, and another links the top of the L to the border.

¹² R. Chambers, *History of the Rebellion in Scotland in 1745, 1746* (Edinburgh, 1828), i. 184.

¹³ Mahon, *The Decline of the Last Stuarts* (1843), pp. 39, 93.

Pieces from these dies, CIII O2/R2, are more often than not pierced at the bottom below the angel's feet. This does not harm the legend on the obverse but does mutilate the dragon; it also means the piece hangs upside down when worn. They are also found pierced additionally at the top, and sometimes with a third hole as well. Some of those with multiple piercings have had one of them plugged.

We do not know at what point the French- and Italian-made Touch-Pieces were pierced, or by whom. Dr Schnieder has expressed the view that the angels of Charles I were pierced by jewellers more or less at the time of use, and not by the mint at the time of issue, and that the gold removed became the perquisite of the jeweller.¹⁴ Presumably the same system was continued with the gold Touch-Pieces of Charles II, James II, and Anne, and could account for the varying sizes of the holes, and also explain why they were not accurately placed in the space made for them. But whether the same arrangement was adopted on the Continent for the silver pieces is unknown. Generally we find the holes in the silver pieces are considerably smaller and more uniform; perhaps because the return from punching a hole in silver was so much smaller than in gold.

A random sample of Touch-Pieces has provided the information in this table:

	<i>Size of hole</i>			<i>Size of hole</i>	
	<i>mm</i>	<i>Per cent of surface area</i>		<i>mm</i>	<i>Per cent of surface area</i>
<i>Gold</i>			<i>Silver</i>		
CAR II (type A)	2.1	1.9	IAC II	1.4	0.6
(type B)	1.9	1.1	IAC 3	1.5	0.6
IAC II	2.1	1.2	IAC III	1.8	0.8
Anne	3.0	2.1	CAR III	1.6	0.6
			H IX	1.8	0.8

Henry IX

When Charles III died leaving only his natural daughter, Charlotte, as issue, the *de jure* succession passed to Henry, Cardinal Duke of York. Unlike his elder brother Henry made no overt claim to the throne but was content to style himself Henry IX on a Touch-Piece and on a medallion struck in the same year.

The medallion is copied from an earlier one ordered by Henry on the death of his father in 1766 and made by Filippo Cropanese. The full legends reads HEN.IX.MAG.BRIT.FR.ET.HIB.REX.FID.DEF.CARD.EP.TVSC. Henry had been made Bishop of Frascati in 1761. The diocese was known as the see of Tusculum, the name being taken from the ruins of that nearby ancient city. The Touch-Piece, being very much smaller, has the legend abbreviated to H.IX.D.G.M.B.F.ET.H.R.C.EP.TVSC.

The obverse of the medallion is signed G.HAM.F., and this is generally assumed to refer to Gioacchino Hamerani (1761–1801). But it could also indicate his younger brother Giovanni (1763–1846). Another possibility is hinted at in Forrer's *Dictionary* where the medallion is included in the lists of work both of Gioacchino and Tomasso Mercandetti. For many years Mercandetti (1758–1821) worked uneasily as a junior partner with the Hamerani brothers at the Zecco, where engraving may have been performed—and even signed—in the name of Hamerani regardless of whose hand had actually been responsible.

¹⁴ H. Schneider, 'The Tower Gold of Charles I', *BNJ* xxx (1962), 304–5.

Henry's first Touch-Piece, although following the traditional pattern, is inferior in detail (Pl. III, 19; Pl. IV, 31). It could have been the work of either of the Hamerani brothers, or even of their father Fernando in the last year of his life. The proportions of the ship are slightly changed and the ports are no longer rectangular but are indicated by rough-drawn circles. On the reverse the dragon's tongue is missing. A curious feature is that both the Hs in the obverse legend appear to be unbarred. This may have been the result of a faulty letter punch: both show signs of the same diagonal fault running downwards from left to right across the letter. However, the unbarred H is repeated on another Touch-Piece from a later die (Pl. III, 22, 23), but only for the H of Henry's name, and not for Hibernia. Did the possible use of a faulty letter punch give rise to a belief that there was some special significance in the malformed letter so that it was deliberately copied by the later engraver?

Specific reports of Henry administering the Royal Touch can be found in a fragment of his diary for part of the year 1788.¹⁵ There is an entry for 1 July showing that Henry 'Signed' two people for the scrofula that morning in the chapel of the Seminario at Frascati. Since there is a gap in the diary between January when his brother died, and July it is unlikely that this was the first Touching of his 'reign'.

The diary, under the date 10 August, states that a specimen of 'the grand medal' had just been received by the cardinal from 'Signor Amerani', and was shown to a few friends. The medal is described in some detail. Somewhat earlier, on 13 May, Henry's niece, Charlotte, Duchess of Albany, had written to her mother in Paris saying that she was sending her one of the 'medals' bearing her uncle's title of 'Henry IX'.¹⁶ This apparent inconsistency can be explained if we assume (and it would seem to be a fair assumption) that what Charlotte sent was in fact a Touch-Piece. These were frequently referred to as 'medals', and indeed the diarist later writes of the 'usual medal' (*consueto medaglio*) being put around an infant's neck. This would indicate a date early in May for the delivery of the first Touch-Pieces. There is no reason to suppose Henry would have waited another two months before using them. It is much more likely that he had been Touching even before he had any Touch-Pieces of his own, and not impossible that he used some of his brother's.

Considerable importance was evidently attached to his Touchings by the writer of the diary, Monsignor Cesarini, the cardinal's chaplain and secretary, as they are signalled each time by the word 'Segno' placed on a line by itself; a distinction shared only by benedictions, consecrations, and like events.

Altogether the diary enumerates nine people who received the Royal Touch: a steady two or three each month. Not as many as might have been expected in view of Henry's known interest—unusual in a highly placed churchman of the time—in the unemployed and destitute.

The French Revolution was to alter dramatically Henry's life. In 1796 Napoleon's army invaded Italy and a huge indemnity was demanded of the Pope. The cardinal contributed to the sum through the sale of his family jewels. Later in 1798 French troops entered Rome and the Pope was taken a prisoner to Valence. Henry himself fled the day before to the Court at Naples. Later he travelled by way of Messina and Corfu to Venice—a journey that was fraught with discomfort and danger. Not only did he

¹⁵ *Diario pe l'Anno 1788 de Enrico Benedette, Cardinale Duca di York*, a fragment of the cardinal's diary (1876).

¹⁶ H. Tayler, *Prince Charlie's Daughter* (1950), p. 111.

lose the income from his many benefices but also all his personal property, with the exception of a small amount of plate which he was able to take with him. Soon even that was sold and the old man—he was 73—was virtually destitute.

It must be to this period in his life that the base-metal Touch-Pieces belong (Pls. III, IV, 20, 32). These have been recorded in lead or pewter, in copper, and in copper plated with silver, some perhaps from moulds taken from a silver piece. Hamerani's dies must have been inaccessible, or perhaps even lost, for it is doubtful if they were used again.

A silver Touch-Piece (HIX O2/R2) (Pls. III, IV, 21, 33), which is in the British Museum, may also have been made after Henry left Rome. It has the appearance of having been cast from damaged moulds: there is a flaw in the reverse, and an excess of metal on the edge of the obverse where the characters HIX should be. This is particularly unfortunate as it prevents one from knowing whether the H is barred or not. The colour of the metal is poor, which may indicate a low grade of silver, and it could easily be suspected of being cast in base metal. It has obviously been copied from the traditional pattern, but the border has been omitted and St. Michael has become rather squat with his legs too wide apart. Was the piece perhaps made locally in Naples? It is pierced, which suggests it may have been used. Henry was in Naples from February to December 1798, and in those early days after his flight from Rome he would still have had some resources left. By the time he reached Venice early in 1800, his fortunes were at their lowest ebb, and if he could then have afforded any Touch-Pieces at all they would surely have had to be in base metal.

In August 1799 Pope Pius VI died, still a prisoner in Valence. By November the conclave to elect his successor was able to assemble at Venice. It took rather longer for the choice to be made and it was March 1800 before the new pontif was named. During this time friends of the cardinal had seen to it that George III knew of the old man's destitution. Unhesitatingly the king granted him an annuity of £4000. (For the previous ninety years the Stuarts in exile had been denied their rightful income of £50,000 annually from the jointure of Mary of Modena!) The following year, 1800, saw improved relations between the papacy and the French government and in June a return was made to Rome. Much to the joy of his flock Henry was soon back in his beloved Frascati. That year he was made Dean of the Sacred College of Cardinals, and in 1803 was translated to the bishopric of Ostia and Velletri. This should have meant a move from Frascati, but owing to his age and his attachment to the place he was allowed to remain there.

The first £2000 of the annuity from King George was paid through the British ambassador in Vienna on 9 February 1800, with promise of an equal sum in July. But there was some administrative delay in this, and it was not until the end of March 1801 that the payments were established on a regular footing. On 12 June 1801 we find Henry being billed for the engraving of two dies, 'on one the figure of St Michael the Archangel, on the other a ship floating on the sea'; also 123 flans, 100 Touch-Pieces, and 3 oz. of silver. This is one of several extant bills for the period 1801-3, which also include other medallion items. They are reproduced in Appendix J. The bills were submitted by Giovanni Hamerani, who styled himself 'Incisore camerale'. His elder brother who had held the office since 1794 had presumably died earlier in the year. Further supplies of the Touch-Pieces were made, 122 in August, 300 in May 1802,

and 300 in September 1803. It would seem from these regular quantities that the demand for the Royal Touch had grown considerably since the first year of Henry's 'reign'.

The 3 oz. of silver bought on the first of these accounts would not have been enough to make the first hundred Touch-Pieces. The single available specimen weighs 50 gr. We must assume that the cardinal's account was a running one. There may have been other bills during the period which have not survived. The cost of the dies is small—about £4. 5s. is the contemporary equivalent.

It is reasonable to equate HIX O3/R3 (Pls. III, IV, 22, 34) with these new Touch-Pieces, and to go further and suggest that they were engraved not by Giovanni but by Mercandetti. Although copied from the earlier pieces the style is very different and the workmanship superior.

The ship is more realistic—though it cannot be identified. It has a different stern; the shrouds are visible on the outside of the hull, and the channel where they are attached is shown in some detail. The gun ports are more numerous and are represented by squares, with pellets inside alternate ones to indicate the muzzles of the guns. While less elaborate, the detail of the rigging is reminiscent of the early Touch-Pieces of Charles II. Again the initial H for Henry is unbarred, but this time the other H in the legend is not, so that the missing bar would appear to be quite deliberate, the letter being made up of two is placed together. On the reverse we have a somewhat emaciated angel with rather exaggerated wings. The dragon is little more than a pattern of ribs and scales; its mouth is open and its barbed tongue thrust out. On both sides the beaded border has been replaced by one of radial lines between two circles.

A closely related piece is the gold one HIX O3a/R3a (Pls. III, IV, 23, 35) which is from an identical pair of dies. The only difference being a raised edge instead of the radial border. In addition to the gold piece illustrated, two other specimens from the same dies are known, one in silver and one in copper, both of which are in the Wellcome Museum. All three are unpierced and show no signs of wear. The relief is much deeper and sharper than on any of the earlier Touch-Pieces, and it is particularly noticeable that there is a considerable amount of detail within the wind-filled sails. Without these specimens it would have been impossible to build a proper description of the worn silver piece HIX O3/R3.

Miss Farquhar mentioned, but did not describe, 'a hard and unpleasing little jetton which exists in three metals, although but rarely in gold'.¹⁷ She had herself seen specimens in silver and bronze, but she did not state how many, and she had only been told of one in gold: all were unpierced. She thought they might have been mid-nineteenth-century souvenirs. Almost certainly her 'jettons' can be equated with O3A/R3A. Unfortunately she had no opportunity of placing a 'jetton' against a specimen of O3/R3, which she did describe, otherwise she would surely have noticed the relationship.

Writing in *The Lancet* (27 June 1914) Dr F. Parkes-Weber described one of these 'jettons' in the Wellcome Museum;¹⁸ dismissing it as 'probably an early modern

¹⁷ H. Farquhar, 'Royal Charities', *BNJ* xv (1922), 178-9.

together with several pierced Touch-Pieces, at the sale of the John Hodgkin collection (Sotheby, 22-3 April 1914, lot 125). The silver 'jetton' was a separate acquisition.

¹⁸ The copper 'jetton' was acquired by the museum,

impression, either from original dies very much "touched up" or from dies made in imitation of original ones.'

He adds, 'I believe that, at least up to 1870, visitors could obtain impressions, at fixed charges, from medallic dies preserved at the Papal Mint at Rome, and that when the dies of interesting and much sought for medals became worn out they were frequently replaced by copies.'

The theory that these 'jettons' could have been later souvenirs is not really tenable. Had that been the case one could expect them to be tolerably common and to turn up from time to time in worn condition. The Hamerani medallion of 1788, for which five pairs of dies can be identified, is quite common. There are many specimens struck from dies showing considerable degrees of rust. At least one mule exists with the obverse of Cropanese's 1766 medallion and the reverse of Hamerani's. It too is struck from dies that were badly worn and rusty. These medallions must have been struck over a long period and some may well have been sold as souvenirs after the cardinal's death. In contrast even his commoner Touch-Pieces are rare, and the 'jettons' and the silver Touch-Pieces (HIX O3/R3) are very rare indeed.

All three of the 'jettons' show the same double striking of certain of the letters in the obverse legend. The displacement of the double striking is not constant and must therefore have occurred when the individual characters were being punched into the die. Although very worn there is still some evidence of this double striking on the used Touch-Piece (HIX O3/R3). The usual step has of course disappeared completely through wear and the letters are almost flat. But one character in particular—the letter R—still shows elements of both strikings where the deeper one was displaced upwards and to the right. The inside serif of the vertical stroke of the R belongs to the deeper striking (marked A in the photograph, Pl. III, 17), while what remains of the tail of the letter (marked B) clearly belongs to the shallower striking.

From the accounts rendered by Giovanni Hamerani (Appendix J) the idea cannot be excluded that Henry used both silver and copper Touch-Pieces, or debased silver ones, after 1800. The copper piece illustrated on Plates III and IV, nos. 20 and 32 is of the type HIX O1/R1. Could this mean that it was this type that was made in 1801 and that the 'jettons' and their associated Touch-Pieces, HIX O3/R3, were made in 1788? Stylistic evidence suggests not. It is more probable that the continuity of style would have been carried on in 1788 and the change made on the return from the exile of 1798–1801. Giovanni is credited with very little work of his own and new Touch-Pieces were being made very shortly after the death of his brother: Mercandetti is the most obvious candidate, and the most likely to have introduced a new style.

The 'jettons' can be explained if we regard them as specimens submitted by a new engraver who had made a pair of dies without the traditional borders and offered the new style Touch-Piece struck in a collar for approval. That approval not being forthcoming, puncheons were raised from the dies and new dies sunk, this time with added borders, and used to strike the more familiar style of Touch-Piece without a collar. This sequence of events might also account for the apparently low cost of making the dies. The engraving and the striking of the specimens being charged on an earlier account and the charge of 20 scudi on the invoice for June 1801 being only the cost of sinking the new dies.

Henry, Cardinal Duke of York, died at Frascati after an illness of four days'

duration on 13 July 1807. He was laid to rest in the crypt of St. Peter's beside his parents and his brother. With his death the story of the Touch-Piece comes to an end, and a practice that had endured for almost eight hundred years passes into history. But the belief that had sustained it was slow to die out completely, and the faith lingered on in places even into the twentieth century.

Touching for the King's Evil began with kings who were also priests: it ended with a priest who became a titular king.

APPENDIX G

THE SILVER TOUCH-PIECES OF JAMES II

Two pairs of dies are known, with no recorded cross-pairing.

Obverse 1. Ship, *The Prince* a first-rater, sailing away from left to right, with a following wind. Sails set are spritsail, the foresail and foretopsail, maintopsail and mizzentopsail. Flags are worn at each masthead, at the Jack-staff, and the stern. The Royal Standard, the Admiralty Flag, and St George's are clearly distinguishable. There is a pennant at the foremast.

Legend: IAC.II.D.G.M.B.F. ET.H.REX

(Note: there is no stop after REX. The ship sits rather high on the medalet and the mainmast and standard cut into the line of the legend at the top)

Reverse 1. St. Michael standing, both feet on the dragon. His lance, thrust through the beast's open mouth, the point projecting at the back of its neck. The dragon's barbed tongue is thrust out and two teeth are visible. The top of the lance forms a cross patee.

Legend: SOLI . DEO . GLORIA.

(Note: The stop after DEO touches the cross of the lance)

Obverse 2. Ship as O1, but sitting lower so that the mainmast and standard are below the line of the legend. The transom is differently decorated, and there are minor differences in the rigging.

Legend: IAC.II.D.G.M.B.F.ET.H.REX.

(Note: The space between F. and ET is greatly reduced, and there is now a stop after REX)

Reverse 2. As R1, but the legend is differently spaced and the stop after DEO is separate from the cross of the lance. The dragon's tongue is missing. There is a slight difference in the feather pattern on the angel's right wing.

Comparative measurements of two unpierced specimens of O1/R1 and O2/R2 are as follows:

	Mean diameter	Over-all thickness	Weight (grains)
O1/R1	19.72 mm	0.7 mm	23.3
O2/R2	19.02 mm	0.67 mm	21.1

APPENDIX H

THE FRENCH-MADE SILVER TOUCH-PIECES OF JAMES III

Two silver Touch-Pieces were made for James III and VIII in France, one with his English title and one with his Scottish.

English

Obverse. Ship *The Prince*, sailing away from left to right with a following breeze. Flags are worn at each masthead, at Jack-staff, and stern.

Legend: IAC 3.D.G.M.B.F. ET.H.REX.

(Note: An Arabic figure has been used. The flags are empty rectangles devoid of any detail. The hull of the ship is from the same puncheon as JII O2)

Reverse. St. Michael and the dragon from the same puncheon as JII R2.

Legend: SOLI. DEO. GLORIA.

Scottish

Obverse. Ship *The Prince* similar to English obverse. Hull from same puncheon, but remainder of vessel engraved with slight differences in angles and proportions.

Legend: IAC 8.D.G.M.B.F. ET.H.REX.

(Note: Use of Arabic figure)

Reverse. From same die as English reverse, above.

The dimensions of the Scottish piece in the Ashmolean Museum and an English piece in comparable condition are as follows

	Mean diameter	Over-all thickness	Diameter of hole	Weight (grains)
Scottish	19.2 mm	0.75 mm	1.4 mm	23.9
English	19.2 mm	0.75 mm	1.5 mm	23.5

APPENDIX I

THE ITALIAN-MADE SILVER TOUCH-PIECES

Obverse. A ship sailing away from left to right against the wind. Mainsail and topsail on foremast, topsails only on main- and mizzen-masts, sprit sail. Flags worn at all mastheads, on Jack-staff, and at stern. All gun ports are square.

Reverse. St. Michael standing with left foot on the dragon. Right foot on the ground beside the beast's head which lies to the left; its barbed tail curls upwards to the right. The lance is poised about to enter the dragon's mouth which is open with the tongue out.

These descriptions are general for all the Italian-made Touch-Pieces. Variations that distinguish the dies are noted below.

James III

Obverse 1. A single gun port forward of the foremast; three more between fore- and main-masts; four between main and mizzen, with three above. Mizzen yard terminates in a bead. Legend: IAC.III.D. G.M.B.F.E.H.R. The stop after R almost touches the top of the sprit sail.



Obverse 2. Two gun ports between fore- and main-masts, unsymmetrically placed; four between main and mizzen, with three above. Mizzen yard terminates in a bead. Legend: IAC.III D.G.M. B.F.ET H.R. The stop after R is close to the top of the sprit sail.



Obverse 3. Two gun ports between fore- and main-masts, with a stop between them; four between main and mizzen, with three above unequally spaced. Mizzen yard terminates in a sharp point. Legend: IAC.III.D.G.M. B.F.ET.H.R.



Obverse 4. Two gun ports between fore- and main-masts, symmetrically placed; four between main and mizzen, with three above, right one being shaped like a question mark. Mizzen yard terminates in a bead. Legend: IAC.III.D.G.M. B.F.ET.H.R.



Reverse 1. Three stops in legend. Angel's wings have shallow curves each side of head. Right wing rises higher than left. The barb on dragon's tail is well defined and symmetrical.

Reverse 2. No stops in legend. Wing curves each side of head are more pronounced. Wings rise to equal heights. A flaw across angel's left leg extends across the calf, his lance and the lower part of his garment.

Reverse 3. No stops in legend. No leg flaw. The spread of the wings is greater and the left one is more pointed at the top. Lance is slightly longer.

Reverse 4. Stop after SOLI. Further slight difference in the spread of the wings. On the right-wing the short fifth feather closest to the body is ill defined.

Reverse 5. No stops in legend. The top of the left wing is blunter, with less of an inside curve than R2 and R3. The right wing is longer and rises higher.

Die-linkages and frequencies of 22 available specimens were

$$O1 = R1 \times 11 \quad O2 = R2 \times 7 \quad O2 = R3 \times 2 \quad O3 = R3 \times 1 \quad O4 = R4 \times 1$$

Charles III

Obverse 1. On lower deck, 2 ports between fore- and main-masts, 4 ports between main- and mizzen-masts. Under poop deck, 3 ports. All ports are square.

Legend: CAR.III. D.G.M.B.F.ET.H.R.

There is no break in the inscription for piercing, but rather too much space has been left between ET. and H. The stop after R is close to the edge of the sail under the bowsprit.

Obverse 2. The same arrangement of ports appears on the hull as on O1 above, but a different puncheon has been used. There are two die flaws: one forms a pellet under the furled sail on the main yard, slightly right of centre, the other a pellet slightly below centre on the port side shrouds.

Legend: CAR.III.D.G.M.F.ET.H.R.

The inscription is more evenly spaced than on O1 above. The stop after R is well spaced from the sail under the bowsprit.

Reverse 1. The same die has been used as JIII R5.

Legend: SOLI DEO GLORIA

Reverse 2. St. Michael's wings have deeper re-entrant curves each side of his head, and the left wing curves outwards where R1 has been straight. A die flaw links the L of SOLI to the beaded border, and another links the S of SOLI to St. Michael's right ankle.

Legend: SOLI DEO GLORIA

Henry IX

Obverse 1. There are five ports on the lower deck and one under the poop-deck. They are annulate, and are not spaced to avoid the shrouds. The mainmast points directly to the stop after ET. The stop after TVSC is level with, but clear of, the point of the spritsail.

Legend: II.IX.D.G.M.B.F.ET.II.R.C.EP.TVSC.

The beaded border is wider than on previous pieces.

Obverse 2. The ship has been copied, but with shorter masts, and a more upright bowsprit. Such ports as are visible are formed by pellets.

Legend: - IX . D.G.M.B.F. - T.E(?) - P.TVSC.

The inscription is badly aligned, especially at the top. The C of TVSC falls within the curve of the spritsail. The piece has no border.

Obverse 3. The ship has been redrawn with more accuracy and nautical detail. There is more rigging and the lines are sharper. The shrouds are carried down to channels on the outside of the hull. The ports are indicated by a row of squares along the line of the lower deck, with each alternate square filled with a pellet. The sea is formed with small choppy waves.

Legend: II.IX.D.G.M.B.F.ET H.R.C.EP.TVSC

There is no stop after TVSC. The mainmast points to the T of ET. The usual beaded border is replaced by a border of radial lines between two circles.

Obverse 3A. Identical with 3 and from the same die but without the border.

Reverse 1. The figures of St. Michael and the Dragon are from the same puncheon as C III R1. and JIII. R5.

But the dragon now has no tongue.

Legend: SOLI DEO GLORIA

The L and I of SOLI are badly aligned.

Reverse 2. St. Michael is shorter and squatter than usual, with his legs spread rather wide apart. His head appears very low on the piece. His wings are long and narrow and the feathers are drawn with chevron-shaped strokes. The dragon's wings are scaled with a honeycomb pattern instead of an underlying skeletal structure.

Legend: SOLI — GLORIA

(The A of GLORIA appears to be unbarred.) The piece has no border.

Reverse 3. St. Michael is tall and skinny with thin arms and legs and a long neck that almost disappears.

The wings are high, coming down to long points. The dragon's mouth is open; its tongue is out, but not barbed; its ribs are clearly showing.

Legend: SOLI DEO GLORIA

The border, as on the obverse, consists of radial lines contained between two circles.

Reverse 3A. Identical with 3 and from the same die, but without the border.

APPENDIX J

ACCOUNTS FOR THE MAKING OF TOUCH-PIECES

1801-1803

(These accounts are included by kind permission of the Right Reverend Mervyn Alexander, DD, Bishop of Clifton. My thanks are also due to Mr Michael Sharp who led me to the finding of them, and to Mr J. G. Pollard who helped me in their understanding. N.W.)

I

Account 12 June 1801*

The engraving and striking of medals by me Giovanni Hamerani, Staff Engraver in the service of His Royal Highness the Most Reverend Signor Cardinal Duke of York as follows

No.		Sc	Ba
		20	—
No. 2	Dies cut, on one the figure of St. Michael the Archangel, on the other a ship floating on the sea	10	—
No. 100	Medalets for the scrofula at 10 each	9	22½
No. 123	Blanks, filed, blanché complete except for being annealed at 7½ each	39	22½
		<hr/>	
No. 3	Ounces of silver of 11 : 21 good quality at 1 : 16 the ounce	3	48
		<hr/>	

* The account is rendered in scudi and baiocchi. 1 scudo = 100 baiocchi.

Only on this account is a charge shown for the preparation of blanks. The total cost of producing each Touch-Piece (excluding the cost of the dies, and without the metal) came to 17½ baiocchi. The only available specimen of these Touch-Pieces weighs 50 gr (English) or 66 gr (Roman) and the cost of the silver would therefore have been just over 13 baiocchi, making the total cost of each piece 31 baiocchi or 1s. 3¼d. in English money of the time.

I the undersigned have received from Signor Giuseppe Agitati Treasurer to S A R the Most Reverend Signor Cardinal Duke of York 39 scudi in current money and 3 scudi 48 in silver money to which I give my hand on 12 June 1801.

Giovanni Hamerani Incisore Camerale

On reverse (presumably in the hand of the Treasurer)

3:48 in fine money which is calculated at 1:42½ per scudo formena
and in addition paid to him in current money

4	95½
39	—
43	95½

2

I the undersigned have received 3 scudi worn money from Signor Giuseppe Agitati, Treasurer to S A R the Most Reverend Signor Cardinal Duke of York for having only struck 122 medalets for the scrofula to which I give my hand 4 August 1801

I say 3: 05 in worn money.

Giovanni Hamerani Incisore Camerale

Note. From the evidence of the previous account we would expect the striking of 122 medalets to have cost 12:20 scudi. Possibly this was only part payment and there may have been a previous bill that included the cost of preparing the blanks.

3

Account 15 May 1802

The striking of medals made by me Giovanni Hamerani Papal Engraver in the service of S A R the Most Reverend Signor Cardinal Duke of York as follows

	Sc	Ba
One pound and two ounces of silver of 11:20 good quality at 13:92 the pound	16	24
Two pounds four ounces of copper for alloy(ing?)		32
No. 300 medalets for the scrofula struck at 10 each one made	30	—
That is piastre	46	56

I the undersigned, have received from Signor Giuseppe Agitati Treasurer to S A R the Most Reverend Signor Cardinal Duke of York, the amount described in the above account in the sum of 46 piastre 56 to which I give my hand 15 May 1802

Giovanni Hamerani Papal Engraver

(?) seven scudi on account of the amount for making the (?) medalets (?) 39 scudi 56 in fine money (?)

Giovanni Hamerani

On reverse

To Giovanni Amerani

39:56 in moneta reale(?) which is calculated at 1:60 per scudo formano

Notes. The charge for copper would appear to be very cheap. The price in England was about 2s. per pound (of 16 oz.) against 5s. 2d. an ounce for silver. The scudo was reckoned at approximately 4s. 3d. so that Hamerani was paying about 5s. an ounce for silver and about 7d. a pound (of 12 oz.) for this lot of copper.

The quantity of silver bought would have made about 120 Touch-Pieces of 50 gr (English) each. The Touch-Pieces, of both types, appear to be of high quality silver with specific weights in excess of 10 gm per cm³. The purchase of so much copper is puzzling unless it was for use in striking other medals. It is unlikely that the cardinal, whose fortunes were now restored, would have issued base-metal Touch-Pieces alongside silver ones at this time.

4

Account 26 September 1803

The striking of medals by me Giovanni Hamerani Staff and Papal Engraver in the service of His Royal Highness His Eminence Signor Cardinal Duke of York as follows

No. 6 Small papal medals (?) in silver of 11 : 20 good quality of weight 2 : 18 : 12* at 1 : 15 the ounce	Sc	Ba
	3	18
Making the medals at 50 each	3	—
No. 6 aforesaid medium size for prizes at the Capitol of weight 10 : 21 at 1 : 15 the ounce	12	50
Making the medals at 1 : 50 each	9	—
For the composition of medalets for the scrofula silver from carlinos 1 pound 2 ounces at 12 : 60 the pound	14	70
For the aforesaid medals 2 pounds 4 ounces copper at 30 the pound		70
Making as usual 300 medalets for scrofula at 10 baiocchi each	30	—
	73	08

I the undersigned have received from Signor Agitati scudo seventy (—) money in balance of the above account to which I give my hand 8 October 1803

Giovanni Hamerani Incisore Pontificio

*2 ounces 18 denari (or scrupoli) 12 oboli

On reverse

To Hamerani

72—

Notes. The price of the copper this time is more reasonable. It is difficult to get away from the implication here that the copper was being used, at least in part, for making Touch-Pieces.

In this account, and the next, Hamerani addresses the Cardinal Duke as 'Eminence'. In September 1803 his friend Cardinal Albani, Dean of the Sacred College and Bishop of Ostia and Velletri, had died. In consequence the office and the See devolved on Henry as the senior cardinal.

5

Account 8 October 1803

The engraving by me Giovanni Hamerani Staff Engraver in the service of His Royal Highness His Eminence Signor Cardinal Duke of York as follows

Seal of office engraved with the coat of arms of His Highness as agreed	Sc	
	10	—
Three lesser (seals) of office as above at 8 each as agreed	24	—
Two (seals) of the third size at 5 each as agreed	10	—
	44	—

I the undersigned have received from Signor Giuseppe Agitati scudi forty-two money in soldi described in the above account to which I give my hand 8 October 1803

Giovanni Hamerani

Note. The Cardinal Duke's new office called for new seals. He displayed the royal arms. He was formally translated to the superior See on 20 November 1803.

« Costo 12 Giugno 1801 »

D'Inizioni e Coniazione di Medaglie fatte da me Giovanni Amerari
Incisore Camerale per Servizio di S. A. Reale. Piedmonte Il Sig. L.
« Duca de Torchi come in appresso »

No. 2 Pili Incisi in una la Figura di S. Michele Arcangelo e
nell'altro una Nave Fluttuante in mezzo al Mare ————— 10
No. 100 Medaglie delle Serapole che a Dio Luna ————— 10
No. 123 Settate, limiate ed imbianchite non mancando altro che di
operare sopra sotto al Torchio a 72 l'una ————— 9 = 122

39 = 122

3 = 148

No 3 Once d'Argento della bontà di 855:21 che a 75:16 l'Oncia
Io Sotto ho ricevuto dal Sig. Giuseppe Agilati Teorico
di S. B. P. Reverendissimo il Sig. Luodineo Duca de Torchi
Lunali ventanove in Moneta Corrente e Lunali 14 e 248
in Moneta d'Argento in fede & questo di 12 Giugno 1801

Giovanni Amerari Incisore Camerale


— A. D. 11. Giug. 1801 —

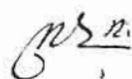
605 20

A. P. Amerari — — — — — 43:95 $\frac{1}{2}$

3:48 m. fin. che ragguagliati a 1:42 $\frac{1}{2}$ per
l'uno formano — — — — — 4:95 $\frac{1}{2}$
e ora pagabili in m. corr. — — — — — 39
43:95 $\frac{1}{2}$

Io Sotto no: viceviti Ludi re Moneta Erosa del Sig. Giuseppe
 pe Agitati Tojovire di L. A. Reale Reventone. il Sig.
 Cardinal Duca de Torchi per avere solamente Curia No: 1112
 Meday line delle Lerofole. in fede di questo di' 4 Agosto 1801
 Nico 7 3:05 Moneta Erosa Giovanni Amerani Incipere Carlo?



= Ad' 8. Agosto 1801 = 
 L. G. Amerani — — — — 3:05

Account 4 August 1801

Conto Li 15 Maggio 1801

di loriagioni di Mede: parte da me Giovanni Homenesani Incisore Pontificio
per Servizio di S. M. R. Reuma: il Sig. C. Duca de Jorch come in apresso

Una libbra, e due Once d'Argento della Banca di S. S. no, che a 13. gr

la libbra importa ————— 13:24

libbra due, e due Once quattro Siane per lega importa ————— 32

No: 300 Mede: lete delle S. roble coniare che a S. S. l'una di fante

va importana ————— 80

sano Graire ————— 48:58

Io sotto: ho ricevuti dal Sig. Giuseppe M. ~~Incisore~~ Incisore Generale di S. M.
R. Reuma: il Sig. C. Duca de Jorch l'imposto del sopradefinito conto
nella somma di Graire quarantasei, e 58 in fede di questo di 15 Maggio
1801 = Giovanni Homenesani Incisore Pontificio

quasi tutti i cori della metà della somma della cattura
delle Mede: che restano, e che restano e S. S. Moneta
fina che è incisa dal Sig. Agiati Giovanni Homenesani

— A. D. 15. Maggio 1801 — ³⁰

A. Giovanni Ancarani — — — 63:ng

per 34:50 ms. Scie: e di raguar l'abid di 10 per
l'abid fante — 63:ng

conto di di 26 Torr: 1403
 Di anticipazioni di Medaglie date da me Giovanni Hammerani Insigne
 camerale, e Pontificio in servizio di S. M. R. emia: Il Sig: Card.
 Duca de Borghese come in appresso
 No: sei Med: Pontificie delle piccole della moneta in Argento
 d'oro Donni 11:20, di peso 12:14:12 che ag 1:15 l'oncia 3=14
 Fattura delle Medaglie ag - 50 l'oncia 3 —
 No: sei delle Pontificie Mezzane del Premio di Campidoglio
 di peso 10:11 = che ag 1:15 l'oncia 12=50
 Fattura delle Medaglie ag 1:50 l'oncia 9 —
 Per la composizione delle Med: delle Scrofole d'Argento: di
 d'oro 11:12 = che ag 12:60 la libra 121=70
 Per la detta Med: d'oro 12:21 = che ag - 30 per libra — 70
 Fattura come il solito di No: 200 Med: delle Scrofole a
 varicchi 10 per ciascuna 30 —
 Io sotto ha ricevuto dal Illmo. Sig: Agitato Sando Jattor 73=04
 moneta per conto del sopradefinito conto infedele 24 962 1803
 Giovanni Hammerani Insigne Pontificio,

A. D. 4. Ottobre 1803.
 A. D. Hammerani —————

5
 (conto di li 4 Ottobre 1803) 5
 D'Inizioni fatte da me Giovanni Hamerani Incisore Cameral, e Pont.
 In servizio di S. A. R. Em. Il Sig. Cardinal Duca de Borgh come
 in appresso //

In foglio Patente Inciso con lo Stemma di S. A. così d'accordo 20 —
 Tre sotto Patente come sopra a 4 l'uno così d'accordo 124 —
 due di Terza grandezza a 5 l'uno così d'accordo 20 —
 Io detto ho ricavati del Sig. Duca per Copie di due 44 —
 per un traduce moneta in saldo del sopra descritto conto in
 fede & questo di 4 Ottobre 1803 Giovanni Hamerani

Ad 9 Ottobre 1803
 G. Hamerani 42

ILLUSTRATIONS

PLATE II. French-made Touch-Pieces

- 1 Silver Touch-Piece of James II. O1/R1
- 2 Silver Touch-Piece of James II. O2/R2
- 3 Illustration of James II Touch-Piece in Pembroke collection
- 4 Touch-Piece of James 3
- 5 Touch-Piece of James 8
- 6 Unfinished puncheon of a ship (for a Touch-Piece?). Hocking 108
- 7 Detail of ship on Peace of Breda medal by John Roettier
- 8 *The Prince*
- 9 Detail of *The Prince* on Norbert Roettier's medal of 1697
- 10 Detail of characters on IAC 3 and 8 and JII O2
- 11 Detail of characters on IAC 3 and 8

PLATE III. Italian-made Touch-Pieces—obverses

- 12 Touch-Piece of James III. O1
- 13 Touch-Piece of James III. O2
- 14 Touch-Piece of James III. O3
- 15 Touch-Piece of James III. O4

- 16 Touch-Piece of Charles III. O1
- 17 Double striking on HIX. O3a and O3
- 18 Touch-Piece of Charles III. O2
- 19 Touch-Piece of Henry IX. O1
- 20 Copper Touch-Piece of Henry IX. O1
- 21 Silver Touch-Piece of Henry IX. O2
- 22 Touch-Piece of Henry IX. O3
- 23 Gold 'Jetton' of Henry IX. O3a

PLATE IV. Italian-made Touch-Pieces—reverses

- 24 Touch-Piece of James III. R1
- 25 Touch-Piece of James III. R2 (leg flaw)
- 26 Touch-Piece of James III. R3
- 27 Touch-Piece of James III. R4
- 28 Touch-Piece of James III. R5
- 29 Touch-Piece of Charles III. R1
- 30 Touch-Piece of Charles III. R2
- 31 Touch-Piece of Henry IX. R1
- 32 Copper Touch-Piece of Henry IX. R1
- 33 Silver Touch-Piece of Henry IX. R2
- 34 Touch-Piece of Henry IX. R3
- 35 Gold 'Jetton' of Henry IX. R3a



1



6



7



2



8



3



9



4



10



11



5



12



13



14



15



16



↑ ↑
A B

↑ ↑
A B

17



18



19



20



21



22



23



24



25



26



27



28



29



30



31



32



33



34



35

THE STRIKING OF PROOF AND PATTERN COINS IN THE EIGHTEENTH CENTURY

G. P. DYER AND P. P. GASPAR

THIS paper records the results of a study of proof, pattern, and currency pieces of the early milled period and of an examination of the surviving tools and dies from that period held by the Royal Mint. These two lines of inquiry began separately, but as the work progressed their inter-relationship became clear and the two finally merged, enabling us not only to formulate objective criteria for the identification of proof strikings but also to postulate a method of production for proof and pattern pieces different from that employed for ordinary coins.

In this period proof and pattern coins are, of course, very often readily distinguishable from their currency counterparts. Patterns by definition present few problems of identification, while on proofs the details of the design are normally more sharply defined and the field is generally superior as a result of the more careful polishing of the surface of the dies. Moreover, in the case of proofs of gold and silver coins, the edge is likely to be plain instead of grained or lettered. Closer examination, however, shows that these visible differences on patterns and proofs can be supplemented by others, less obvious perhaps but arguably more significant for the light they throw on the method of production.

The most important of these additional differences relates to the lettering. Attention has often been drawn to the fact that on currency pieces letters with uprights have bases that are frequently fishtailed or bifurcated, and indeed this type of lettering is regarded as one of the most characteristic features of the eighteenth-century coinage.¹ By contrast, on proofs and patterns the letter bases are usually square and unindented and seldom show the exaggerated serifs associated with currency pieces. This same firmness of outline is present also in the beading around the rim, for on proofs and patterns the beads are normally well defined and complete, whereas on currency pieces they are elongated and tend to disappear off the edge of the coin. The differences are well illustrated by a pair of George II crowns of 1746 in the Royal Mint collection (Pl. V, 1). This example has been carefully selected to illustrate the distinction, and it would be as well to emphasize that there is not a hard and fast rule, for fishtailed letters can sometimes be seen on proofs and square letters on currency pieces. The tendency, however, is undeniable.

Another consistent feature of these early patterns and proofs is the evidence they bear of having received more than one blow from the dies. This normally shows itself in a partial doubling of the letters, but on occasion the displacement is much greater, as on a proof guinea of 1729 (Pl. V, 2). Doubling of busts and shields can also occur and, somewhat strangely, the doubling may be present on only one side of the coin. It is

¹ W. J. Hocking, *NC*, 4th ser. ix (1908), 97.

easiest to see where a coin has been allowed to tone naturally, since the squashed letters from the previous blows have a tendency to tone less quickly and therefore show up as bright areas.

To the square letter bases and the doubling can be added a cross-section that may frequently be wedge-shaped, a feature that is often accentuated by vertical burrs thrown up in striking. A very sharp burr may be seen, for example, on a Una and the Lion five-pound piece in the British Museum, and the authors have recently examined an 1831 twopence on which the burr on the obverse is so sharp and prominent that it can only be described as grotesque. These are nineteenth-century examples, and it should perhaps be stressed that the reference in the title of the paper to the eighteenth century is merely a convenient shorthand. The period to which these comments relate begins with the milled coinage and some of the features which have been observed are still apparent as late as the middle of the nineteenth century.

The edges of proof and pattern coins often appear roughly filed, and in addition occasionally show a single step or raised witness line at some point around the circumference. The step is clearly shown on a pattern farthing of Queen Anne (Pl. V, 3), where it forms a distinct and irregular ledge. By the late eighteenth century the step is no longer seen but has been replaced by a regular raised witness line, as on a proof Irish halfpenny of 1775 (Pl. V, 4). Finally, late eighteenth-century proofs usually have an upright die-axis and show a disregard for standard weight and fineness; they are generally made of fine gold or silver and their weights may vary substantially from standard and, for coins of the same denomination and date, from each other.

It seemed that many of these differences could not be explained merely by more careful treatment or by heavier pressure in striking. On the contrary, the differences appeared to be related to each other and to reflect a fundamental difference in the method of striking. For this reason attention was increasingly focused on the surviving dies and the surviving mint records.

The Royal Mint has a collection of over 10,000 obsolete master tools and dies, and although nineteenth- and twentieth-century material makes up the greater part of the collection there are some 600 or so items from the early milled period. Of these items more than half are punches, the remainder being matrices and dies. They were catalogued by an unknown hand about 1840² and were recatalogued and published by W. J. Hocking in 1910 as part of Volume II of his *Royal Mint Museum Catalogue*.³

In checking the tools against Hocking's catalogue, an immediate difficulty was encountered. This concerned a group of about twenty items with lettering and designs complete which Hocking had described as matrices,⁴ that is to say, the tools used to raise punches which in turn were used to sink dies. These tools do indeed resemble modern matrices by having gently tapering sides instead of a neck. Hocking assumed that they could not be dies, which by his time always had a neck in order to permit the use of a collar, and he was probably encouraged in this view by the presence in the collection of about seventy contemporary dies which do have necks. Thus he might

² Anonymous manuscript catalogue of the die collection of the Royal Mint (c.1840) in the Royal Mint Library, 1328 entries, 100 pp.

³ W. J. Hocking, *Catalogue of the Coins, Tokens, Medals, Dies and Seals in the Museum of the Royal Mint*,

vol. ii, Dies, Medals and Seals (1910).

⁴ *Ibid.*, nos. 18, 19, 94, 99, 237, 324, 326, 353, 356, 360, 366, 373, 390, 393-6, 399, 401, 404, 406, and 408. See P. P. Gaspar, *BNJ* xlvii (1977), 55.

well have believed that dies with necks were normal while the much smaller number of items without necks served the more exotic purpose of raising punches.

The identification of these items as matrices, however, raises impossible difficulties, because without exception all are beaded and lettered and no details of the designs are omitted. Hocking would have us believe, for example, that the quarter-guinea reverse tool of 1718 (Pl. VI, 5), complete in all its details, is a matrix from which punches were made. If Hocking were right, this would mean that on all dies the position of the inscription in relation to the design would be consistent, but study of early milled coins indicates that there is no such consistency, that it is in fact the variation in the positioning of the inscription that is far and away the easiest means of distinguishing individual dies. Moreover, among the large number of punches that survive from this period none exists with beading and lettering, and on most of the reverse tools certain details of the design in addition to the inscription have been omitted and left for the engraver to add by hand to each individual die. Thus the quarter-guinea reverse punch (Pl. VI, 6) is incomplete in all these ways and it is not easy to see how it could have been made from the complete and finished tool shown in Pl. VI, 5. If anything, the opposite is true, for the other tool must surely be a die sunk from such a punch and then completed by hand.

To be more specific, two of Hocking's so-called matrices are for the obverse and reverse of the Cromwell Crown of 1658.⁵ The obverse carries across the base of the effigy the same crack that is so evident on the coins and it is well known that the surviving coins show the development of this crack across the effigy. Now if this tool were a matrix, one would have to suppose either that a series of punches was raised from a progressively cracking matrix or that there was a series of matrices which all cracked in the same place but to varying extents. Either supposition is frankly absurd, and it is evident that the tool is the actual die that struck the coins. This conclusion persuaded us that all twenty or so items in this category were probably dies but caution dictated that independent means should be sought for confirmation.

Fortunately, die records survive and indeed for the eighteenth century they are surprisingly complete.⁶ Under the terms of the Mint Indentures the engravers were expected at intervals to produce for inspection all the coinage tools in their possession. The numbers were then checked and worn-out or defective tools were defaced, while those fit for further use were left good and returned to the engravers. There is an isolated account of 1685 and then very nearly a complete set of returns for the whole of the eighteenth century and until 1812. The returns were made at irregular intervals, with sometimes a gap of only a few months between returns and sometimes as long as six or seven years. By comparing each return with its predecessor it becomes possible to work out for each denomination how many matrices, punches, and dies were sunk in the interval between the two returns. Even better, for the thirty years between 1743 and 1773 the accounts record the actual dates on which the new matrices, punches, and dies were sunk.

These returns, which Hocking appears to have neglected, provide indirect but convincing evidence that the disputed items are dies. They show that on six occasions during the eighteenth century punches and dies, instead of being destroyed, were

⁵ Hocking, 1910, nos. 18 and 19.

⁶ PRO MINT 14/8-14/13.

withdrawn from the engravers' stock and issued to the Warden of the Mint or to the Mint Office:

in 1702 46 punches were issued to the Warden
 in 1717 48 punches were issued to the Warden
 in 1724 28 punches were issued to the Warden
 in 1744 34 punches were issued to the Warden
 in 1746 1 punch was issued to the Warden, and
 in 1768 33 dies were issued to the Mint Office.

It soon became clear that the 1717 withdrawal of forty-eight punches corresponds with the present holding of Queen Anne tools, the 1724 withdrawal with the holding of George I tools, and the 1744 withdrawal with the Young Head tools of George II. If the disputed items are assumed to be dies, and if obsolete items remaining in the engravers' stock in 1812 are included, then all but a handful of tools now surviving in the mint collection for the period from 1702 to 1800 can be accounted for.

The two-guinea and half-crown tools illustrate this particularly well:

TWO GUINEAS

	<i>Matrices</i>		<i>Punches</i>		<i>Dies</i>	
	<i>Obverse</i>	<i>Reverse</i>	<i>Obverse</i>	<i>Reverse</i>	<i>Obverse</i>	<i>Reverse</i>
Issued to Warden, 1717	—	—	1	1	—	—
Issued to Warden, 1724	—	—	1	1	—	—
Issued to Warden, 1744	—	—	2	2	—	—
Issued to Mint Office, 1768	—	—	—	—	2	—
Left good, 1812	1	1	1	1	1	1
Total	1	1	5	5	3	1
Current holding of 1702-1800 tools	1	1	5	5	3	1

HALF-CROWN

	<i>Matrices</i>		<i>Punches</i>		<i>Dies</i>	
	<i>Obverse</i>	<i>Reverse</i>	<i>Obverse</i>	<i>Reverse</i>	<i>Obverse</i>	<i>Reverse</i>
Issued to Warden, 1717	—	—	2	3	—	—
Issued to Warden, 1724	—	—	1	—	—	—
Issued to Warden, 1744	—	—	1	1	—	—
Issued to Mint Office, 1768	—	—	—	—	2	—
Left good, 1812	—	2	—	1	—	1
Total	—	2	4	5	2	1
Current holding of 1702-1800 tools	—	2	4	5	2	1

This convincing reconciliation can be repeated for the other denominations, although it must be stated that adjustments to Hocking's descriptions were necessary since some of the reverse tools had understandably been assigned to the wrong reign while certain others had been incorrectly identified.

The correlation between the entries in the die records and the present holdings of the mint collection is undoubtedly of great significance. It throws light on the structure of the collection, on its purpose and its development, and enables the surviving tools to be

seen for the first time in their proper context. Much of this will be discussed on other occasions, and for the moment we are concerned only with the relevance of the correlation to the twenty fully lettered items which Hocking had described in 1910 as matrices. Its importance here is that it provides a contemporary description of many of the disputed items since it can be demonstrated that they must have come into the collection as part of the group of thirty-three dies issued to the Mint Office in 1768. They are therefore dies and further reassurance came with the discovery that the catalogue of the collection prepared about 1840 also describes them as dies.

The reattribution of these tools raises a fresh question. If both groups are dies, it needs to be explained why in the same period some dies have necks while other, contemporary, dies do not. That an explanation should exist seems almost inevitable from the evidence of the die records, which suggest very clearly that the die-makers were hard-headed men whose approach was essentially practical. They were hardly likely to indulge in an extra process, the turning of the neck, without good reason and the more so since they would no doubt have realized that the junction of the neck with the body of the die becomes a point of weakness.

In answering this question the mint records again proved helpful. In an account for the year ending 5 January 1764,⁷ Reuben Fletcher, the Mint Smith, charged ten shillings for a 'pair of shouldered half guinea dies for pattern pieces' and the following year the same amount for 'a new pair [of] shouldered dies for shilling proof pieces' and 24s. for 'four pairs [of] shoulder dies for proof pieces for small money'. The term 'shouldered die' appears to describe well enough a die with a neck, and the implication is obvious that dies with necks were specially prepared for the striking of proof and pattern coins. This was quickly confirmed, for it was soon possible to locate proof and pattern pieces which had been struck from about twenty of the surviving shouldered dies. For example, the cracks in the shield on the reverse die for the quarter-guinea proof of 1764 appear on a coin in the mint collection (Pl. VI, 7, 8). As proof pieces are listed in the catalogues for the date and denomination of nearly all the shouldered dies, there seems little doubt that, when a greater number of proof and pattern pieces have been examined, many more of the surviving shouldered dies will be matched with coins struck from them.

The realization that shouldered dies were used for proof and pattern pieces and tapered dies for currency pieces suggested the need to consider seriously whether important differences in production techniques were implied by the presence of a neck.

Attention has already been drawn to the observation that letters on proof and pattern pieces tend to have uprights with square bases, while the same letters on currency pieces tend to be fishtailed. On the dies themselves, whether shouldered or tapered, the letters always have square bases so that the presence of fishtails pointed to some difference in the way in which the two types of dies were used. The presence of a neck suggests the use of a collar to hold the blank in place at the moment of striking by the dies, while the gently tapering sides of the currency dies make it just as certain that a collar could not be used. And when a collar is not present there is nothing to restrict the outward flow of metal when the blank is squashed between the dies with the result that metal flows away from the bases of the letters. Those with vertical uprights

⁷ PRO MINT 1/2.

are distorted most as the upright tends to act as a channel and therefore encourages the flow of metal, leaving a hollow which gives the letter a fishtailed appearance. Even curves are affected as metal is pulled away and the beads, too, are dragged outwards and lose their shape. A collar not only restricts this outward flow but also produces a flow back towards the centre, allowing the metal to take up the exact shape of the design details on the die and minimizing the distortions produced by uncontrolled metal flow.

This observation that the fishtailed lettering and fugitive beading so typical of early milled coins might be no more than an accidental consequence of the striking process arising from the absence of a collar is not new,⁸ but it seemed right to subject it to practical confirmation. An experiment was accordingly arranged by the Royal Mint involving the use of a pair of modern dies on which the letters had uprights with square bases. When coins were struck from these dies in a collar the bases remained square, but when the dies were used without a collar the lettering at once developed fishtails and other distortions. The detailed results of these experiments will, it is hoped, be published in due course, but briefly stated they appear to show that fishtailing occurs regardless of the metal used, the thickness of the blank, or the force of the blow.

Further confirmation of the restraining influence of the collar may be seen on mis-struck pieces. It sometimes happens, for instance, that at the moment of striking a blank may rest on top of the collar rather than within it, and the result is the presence of fishtails and fugitive beading on the struck piece (Pl. VII, 9). Alternatively, if a blank is undersize the collar will not fulfil its normal restraining function and fishtailed lettering will again result. This can happen when a blank intended for another coin is unintentionally mixed with larger blanks (Pl. VII, 10) but will also occur where a small segment is missing from the circumference of the blank (Pl. VII, 11). In other words, the blank has to make full contact with the collar if fishtails are to be prevented.

That a collar of some kind was present when eighteenth-century proof and pattern pieces were struck therefore seems virtually certain. This would rule out use of an ordinary coining press in which the upper die was attached to the descending screw since it is doubtful if the movement of the screw could have been controlled accurately enough to allow descent of the upper die into a collar without frequent smashing of the die against the collar. Rather, it points to the use of a different technique and, again, the accounts of Reuben Fletcher, the Mint Smith, provide the vital clue. His accounts for 1763,⁹ in addition to recording the manufacture of shouldered dies, include the following entry for work carried out in the die-press room of Tanner, the Chief Engraver: 'To a man eight days assisting at the press in striking patterns, sinking dies, etc.'

Fletcher's account refers to the die-press room and therefore points clearly to the use of a die-sinking press to strike proof and pattern pieces. Until recently the Royal Mint in fact used such a press to strike medals, and it was a consideration of recent medal-making techniques which suggested that in the seventeenth and eighteenth centuries proof and pattern coins might have been struck on a screw press in much the same way as modern medals. This technique involves a loose assembly of dies and collar (Fig. 1). The lower die is placed on a block on the press table, a collar is fitted around its neck,

⁸ C. W. Peck, *English Copper, Tin and Bronze Coins in the British Museum, 1558-1958* (2nd edn., 1964), p. 143.

See also Gaspar, 1977.

⁹ PRO MINT 1/2.

a blank placed inside the collar, and the upper die then placed on top of the blank, its neck enabling it to fit inside the collar. The whole assembly is then hit by the descending screw or ram of the press, the essential difference between this and the standard coining press being that the upper die is loose and not attached to the ram.

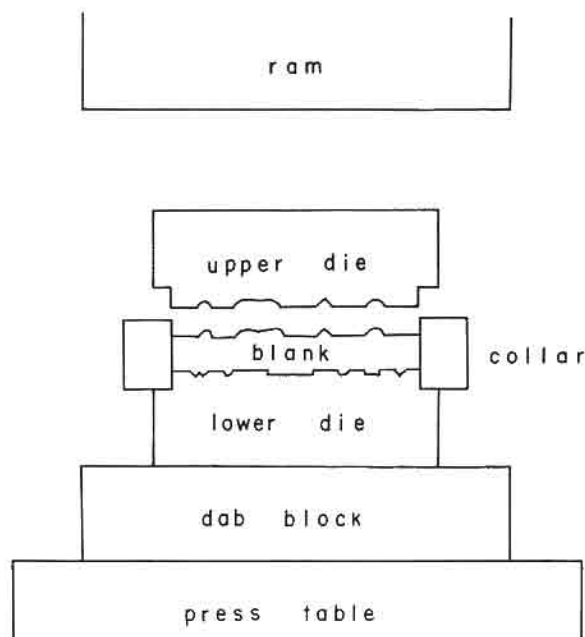


FIG. 1. The striking of medals with loose dies.

A blank after it has been struck is shown within a collar, both blank and collar resting on the lower die. The upper die is depicted as it would appear while being removed after a blow or while being repositioned for a subsequent blow after intermediate annealing of a partially struck blank:

One of the advantages of this method is that multiple blows can be struck to bring up the relief of the design. The fact that the dies and collar are loose enables the partially struck coin to be removed, annealed or softened if necessary, and then carefully repositioned between the dies to receive another blow from the ram. Even though the use of loose dies permits the locking by hand of the dies and the partially struck coin, perfect registration of blows may not always be achieved and it is this that explains the doubling of letters and design elements that is often observed on early proofs and patterns. Also explained is the seemingly curious feature of doubling sometimes being observed on one side only of a proof piece since in these cases just one of the dies would have been out of register when a subsequent blow was received from the ram.

If this reconstruction of the striking technique is correct, another feature of proof and pattern coins to which reference was made at the beginning of this paper can be explained, namely their wedge-shaped cross-section. This would occur if the descending ram, either because it failed to descend accurately or because the dies had not been centrally located, or because the bottoms of the dies were not level, caught the assembly of dies, collar, and blank a glancing or uneven blow. That this could have happened on eighteenth-century presses seems unquestionable since even now precautions have to

be taken with modern dies and presses to prevent the production of wedge-shaped medals. Thus it is still occasionally the practice of the Royal Mint to ensure a uniform thickness by turning the assembly 180° and repeating the blow.

It will be noticed that this method of production requires the presence of a collar. Some kind of collar, which may fit only loosely as in modern medal-making practice, must be employed to prevent extreme sideways motion of the dies upon impact of the screw. The necks of the shouldered dies would therefore appear to have been necessary so that a collar could be used to hold the loose upper die over the blank and the lower die. This collar, as we have seen, would have the effect of producing square letter bases and well-defined beads, but it must be emphasized that however desirable these features might be in themselves they do not supply the reason for the presence of the collar. On the contrary, the collar was employed solely to hold the dies and the blank together, so that square letter bases on proof pieces like fishtailed bases on their currency counterparts are merely an accidental consequence of the striking process.

The loose collar explains also the presence on proof and pattern pieces of fins and burrs. A perfect fit of collar and dies would be difficult to achieve (some early shouldered dies are nearly oval in shape), and fins and burrs would be formed by the metal forcing itself into gaps between the collar and the dies. But what the loose collar does not seem to explain is the single step or witness line found on the edge of many plain-edged proofs and patterns. As has been illustrated (Pl. V, 3, 4), both step and line can be prominent features, and if on occasion they appear not to be present it may be that they have simply been obscured by filing. Both step and line appear to stem from a common cause, but what has produced them is by no means obvious. That there is only a single step or line rules out the use of a modern-style split collar consisting of three separate segments, since there would then have to be three lines instead of one. Also ruled out is a parallel-bar edge-marking machine of the type available at that time for giving blanks lettered or grained edges since there would then have to be a second step or line at 180° from the first.

The device that was most probably employed is a steel band of the type described by Ansell.¹⁰ In his discussion of the Petition Crown Ansell takes up the suggestion of a colleague that the edge inscription was engraved on a band of steel something like a watch spring (Pl. VIII, 12). This band was then coiled round the inside of a plain collar. After striking, the band and the coin were knocked out from the collar, whereupon the band sprang free from the coin. This would leave a single witness line, produced where the ends of the band either meet or overlap.

This may make sense for a special coin like the Petition Crown but it does seem somewhat complicated for plain-edged proofs, especially at a time when roughly scored edges were apparently acceptable. The use of such a band is quite unknown to the modern generation of mint officers, but in its favour from a practical point of view is its usefulness as an aid in the ejection of the coin from the collar. Arguably, indeed, it would have been essential in the case of the 1787 proofs, for some have a noticeably channelled edge, and without a band the horizontal burrs would have trapped the coin in the collar. The horizontal burrs themselves can be explained if the band were not quite as wide as the thickness of the blank, while the slight fluctuation in the position

¹⁰ G. F. Ansell, *A Treatise on Coining* (1862), p. 25.

of the line on die duplicates can be explained by the need to reset the band for each new coin.

There is, too, something else which has helped to overcome initial scepticism about the use of a band. At first sight two pattern farthings¹¹ of Queen Anne in the mint collection seemed to be a mass of irregular file marks but a comparison of the two pieces showed that the marks match each other perfectly all the way round the edge (Pl. VIII, 13). This test has since been successfully repeated on proof two-guinea pieces of 1733, on silver proofs of George II, and on three pattern halfpennies of Queen Anne,¹² struck from the same obverse die but from three different reverse dies. It is clear that there is no such thing as a plain edge on proof and pattern coins, that beneath their plainness they are likely to bear distinctive arrangements of scratches and marks that may be common to pieces that are die duplicates. These marks, which in any case are in relief and cannot therefore have been produced directly by a file, could well have been produced by contact with a band.¹³

The Royal Mint has again been kind enough to conduct a practical experiment to support this conclusion. The results have still to be carefully considered and analysed but it has been possible by using a band with chamfered ends to produce a witness line of the type seen on late-eighteenth-century proofs. The deep marks, however, remain a problem. Although the thin bands used for the first experiments did tend to crease and score in use, the overlap was marked by two lines instead of one. A rather thicker band succeeded in producing a single line, but on this band the irregular 'file' marks had to be induced by hand (Pl. VIII, 14). Nevertheless, the successful reproduction of a single witness line at least shows that the steel-band idea is not as improbable as it seems. The 'file' marks may indeed have served, and been intended to serve, a practical purpose by gripping the blank and thus maintaining the position of the band between successive blows of the press.

The idea of the band may even tell us something about the few proofs of this period which have lettered or grained edges. These pieces appear different from their currency counterparts, the lettering for the most part being less coarse and the graining less pronounced. The lettered edges, as on currency pieces, have overlaps or joins at 180°, but the difference in the appearance of the letters and the signs of damage and vertical displacement perhaps point to the use of a different process. Whether this involves a two-piece band, a split collar, or some other means remains to be determined. The grained-edge proofs may be rather easier to explain if only because of an interesting irregularity which appears on the proof shillings and sixpences of 1746. Pl. VIII, 15 shows a proof sixpence of 1746 with a distinct discontinuity in the graining. The same discontinuity appears on other specimens and it occurs in much the same place on them all, that is to say, on die duplicates its position varies as little as does that of the step or line on plain-edged coins. It is therefore tempting to argue that the graining is the result of contact with a grained band wrapped round the inside of a plain collar.

The question of a steel band, though not without interest, is hardly central to the argument and we ought perhaps to return to general principles. The basic idea of a

¹¹ W. J. Hocking, *op. cit.* vol. i, Coins and Tokens (1906), nos. 1558 and 1565.

¹² Peck, 1964, nos. 723, 725, and 730.

¹³ A caution must be sounded that the edges of some

'plain-edged' proof and pattern coins, and medals, were filed, and these pieces will show unique patterns of *incuse* scratches that sometimes obliterate or at least obscure the raised marks.

loose assembly of dies and collar was, as previously stated, suggested by knowledge of modern medal-making processes and therefore a closer look at eighteenth-century medals seemed likely to be instructive. What was found on these medals were all those features which have already been described for proofs and patterns: the square letter bases, the doubling, the wedge-shaped cross-section, the steps, and the witness lines. In addition the dies used to strike the medals were nearly always of the shouldered type associated with proof and pattern coins. The conclusion is therefore inescapable that there is a far closer relationship between proof coins and medals than there is between proofs and the corresponding currency pieces.

On reflection this need not cause surprise. Permission to strike medals was one of the perquisites of the mint engravers until the middle of the nineteenth century. The wish to concentrate this work within their own department would be natural, and use of a die-sinking press had the advantage of enabling the medals to be struck without recourse to the moneyers and their coining presses. It is not suggested that the moneyers never struck pattern and proof pieces, but it is reasonable to suppose that patterns and proofs might well generally fall into the same category as medals and be regarded as very much the private preserve of the engravers. Indeed, it is known from the nineteenth-century records that the supply of proof pieces, subject to certain official constraints, was usually handled by the engravers, and in 1787 that the Master of the Mint's instruction to strike 168 proof sets of the new guineas, half-guineas, shillings, and sixpences was sent direct to Lewis Pingo, the Chief Engraver, and not to the moneyers.¹⁴ If, indeed, the engravers were able to strike proof pieces on their own account there might well be a financial incentive to preserve and use proof dies for as long as possible. This may explain both why more proof dies have survived than normal dies and why the former are often badly cracked and chipped.

This administratively tidy arrangement leads us to associate pieces with indented letter bases with the moneyers and those with square letter bases with the engravers. Stated as baldly as this, it may seem unimportant to the numismatist but the successful separation of moneyers' and engravers' pieces, so fully supported as it is by objective criteria, may perhaps throw light on several numismatic problems. It could well be helpful, for instance, in the case of the rare Dorrien and Magens shillings of 1798: strays from the production run halted by the Privy Council would have indented letter bases while square letter bases would indicate a proof made by the engravers, possibly before or after the event. Another example is the Queen Anne farthing of 1714, where we would need to see indented letter bases or fugitive beading before we could be convinced that there are currency pieces. As for official medals, those with fishtailed letters now require explanation: there is, for example, in the British Museum a Coronation Medal of Queen Anne with indented letter bases and it was therefore interesting to find documentary evidence that some of these medals were struck by the moneyers.¹⁵

There are still a number of grey areas in this account of how proof and pattern coins were struck during the eighteenth century and much work remains to be done. Nevertheless, it is hoped that sufficient progress has been made to indicate the fresh insights that may be gained from an exercise that combines a study of the coins with, on the one hand, an examination of the surviving dies and, on the other, an equally careful

¹⁴ PROMINT 1/14, p. 12.

¹⁵ PROMINT 6/2.

examination of the mint records. It is this three-pronged approach, involving coins, dies, and mint records, which we believe to be the way forward in the study of the early milled coinage.

Acknowledgements

We should like to acknowledge the assistance which we have received from various members of the staff of the Royal Mint. In particular we wish to thank Mr E. M. Phillips, who supervised the two experiments to which we refer, and Mr R. C. Meaden, who provided the illustrations.

The American National Endowment for the Humanities has generously supported research into the die collection of the Royal Mint and its organization. The studies reported in this paper have developed from this research, which is continuing.



1



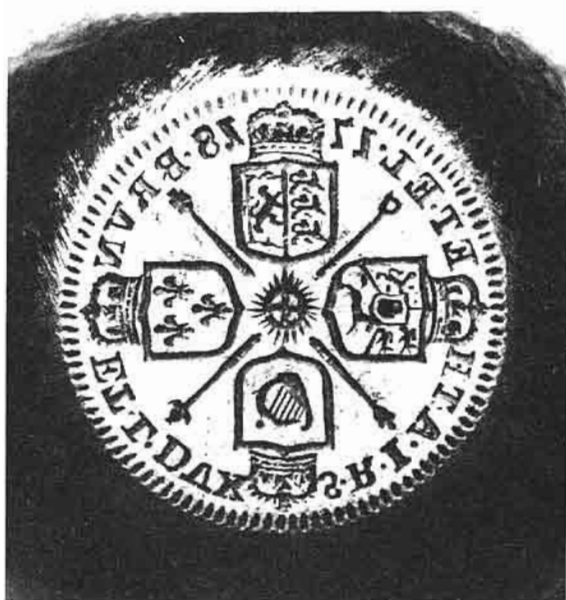
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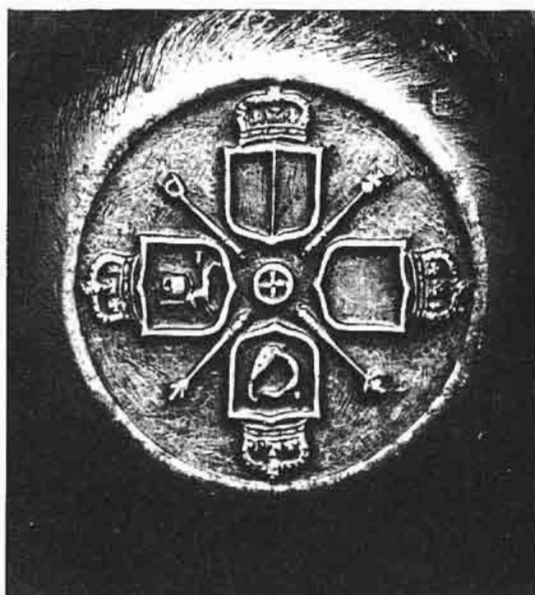
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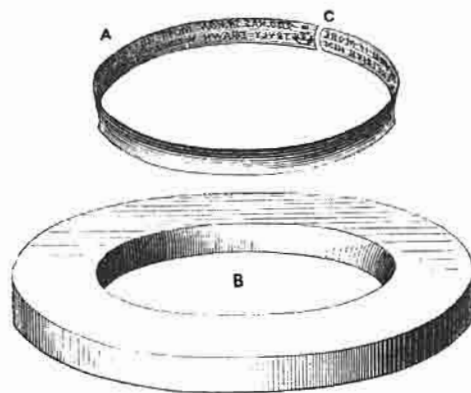
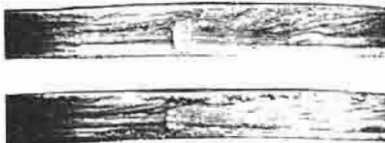


Fig. 19.—Fillet and Collar.

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13



14



15

MISCELLANEA

NOTES ON NINE ANCIENT BRITISH COINS FROM BATH

THE COINS

THE excavation at the source of the spring below the King's Bath—conducted by Professor B. W. Cunliffe in December 1979—produced, among other items, a total of at least 8000 coins. The vast majority of these proved to be Roman, but nine of the number were Celtic silver or silver-plated pieces.

The Celtic coins came from two separate deposits: Section South-West 3 containing the first five coins listed below, and section Centre-South 3 (group IV), the remaining four. All are published here for the first time (Pl. IX).

1. A Gaulish minim, base silver or copper alloy. The identification of this coin is unfortunately rather speculative, since it is of previously unpublished type.

Obv. A bare clean-shaven head facing right, with a torc encircling the neck. In front of the head is a wheel with diagonal spokes.

Rev. A lion facing left, with a floral decorative motif in the field above the beast's head. There is a beaded line around the perimeter of this coin.

Weight. 0.35 grams.

The reverse of this coin corresponds very closely to that of a coin which A. Blanchet¹ has ascribed to Eastern Armorica. The obverses of the two coins do not correspond so nearly. The Gaulish coin bears the inscription *ESVIO* in front of the head, which is quite different from the Bath coin in point of style, and which faces left rather than right. No close parallel has been found for the head on the Bath minim, although since it is Romanized in character, it is likely to be late in the Armorican series, to which it is assumed that it belongs.

2. The Durotrigian quarter-stater (Mack 319).

Obv. This bears what is described by Mack² as an 'uncertain' object. Interpretations of the design vary widely. It is sometimes regarded as an oared ship, sometimes as a degenerate helmeted head

derived from a Greek prototype, while I would prefer to regard it as a stylized boar. A design very similar to this, unambiguously a boar, occurs on the Icenian silver coins (e.g. Mack 407) probably minted around 15 BC. It is hence plausible, at least on chronological grounds, that these copy Mack 319 or one of its forerunners.

Rev. A geometric design consisting of an angular crooked line engraved across the centre, with various abstract forms above and below.

Weight. 1.15 grams.

3. A Dobunnian uninscribed silver coin, class F (Mack 382). This coin is of cruder execution than the other coins of this tribal group in the assemblage, and has a distinct bend or fold, which shows as a depression on one edge of the obverse and a raised flap on the reverse.

Obv. Highly abstract head facing right. The facial features have been reduced to O and X ornaments. In the field, in front of the face, are two reverse S ornaments with a smaller S on its side inserted in between them. Also in the field are a series of pellets and pellets within circles.

Rev. Triple-tailed horse running to the left. The head, shoulder, and haunch are depicted by a pellet within a circle motif. Above the horse is a cross, below a pellet within a circle and a three-petalled flower. Beneath the tail is another pellet within a circle.

Weight. 1.25 grams.

4. A Dobunnian uninscribed silver piece, class F (Mack 382). This coin is of altogether finer preservation and workmanship than the previous example of its class.

Obv. and *Rev.* as above.

Weight. 1.03 grams.

5. A Dobunnian silver piece inscribed *ANTED*, class G (Mack 387).

¹ A. Blanchet, *Traité des monnaies gauloises* (Paris, 1905), i. 319.

² R. P. Mack, *The Coinage of Ancient Britain* (3rd edn., 1975), p. 121.

Obv. Crude head facing right. The face is framed by cup and ball ornaments. The hair is depicted by a number of triangularly arranged pellets. Before the face are two reverse s ornaments with a smaller s placed on its side inserted between them. In the field are two pellets within circles and a further series of pellets.

Rev. Disjointed triple-tailed horse to the left, with a beaded mane. This latter feature is an attempt at increased realism, and occurs on six of the nineteen Anted silver pieces in the Index of Celtic coins housed in the Institute of Archaeology in Oxford. The horse is marked head, shoulder, and haunch with a pellet within a circle. The legend is arranged both above and below the horse—AN above, TED beneath—although whether A or Λ is intended is uncertain. Above the horse and below the legend is a large pellet. A variety of other pellets occur within the field including one on either side of the tail. A pellet within a circle is situated immediately under the horse's body.

Weight. 1.20 grams.

6. A Dobunnic uninscribed silver piece, class F (Mack 382). This coin appears to be a contemporary forgery. It is substantially corroded, whereas all the other coins are rather well preserved, and has a red copper or copper alloy core visible beneath the surface. These details are closely paralleled in two other known examples of contemporary forgeries of Dobunnic silver coins.

Obv. This is poorly preserved. No detail can be discerned beyond the outline of the profile facing right.

Rev. Triple-tailed horse to the left, the shoulder represented by a pellet within a circle. The diagnostic feature is the cross above the horse's back, which occurs only on coins of class F.

Weight. 0.84 grams, below average for a coin of this class.

7. A Dobunnic uninscribed piece, class E or F. The silver appearance of this coin has been well preserved. The obverse is distinctly more worn than the reverse, which is in good condition.

Obv. Crude head in profile to the right. The face is fringed by cup and ball ornaments, and the facial features have been reduced to a pattern of o and x elements. The head occupies most of the obverse, and hence the diagnostic items which occur in the field before the face are not included. Only one reverse s ornament is visible.

Rev. Triple-tailed horse to the left. Head, shoulder, and haunch are represented by pellets within circles. A flower is present below the horse, and a pellet within a circle is placed in front of the animal's neck.

Weight. 0.65 grams.

8. A Dobunnic silver piece inscribed EISV, class H (Mack 389). This coin again retains its silver appearance and is generally in good condition.

Obv. Crude head facing right, fringed by a series of cup and ball ornaments, and with the facial features reduced to a pattern of o and x elements. A reverse s ornament and pellets within circles occur within the field.

Rev. Triple-tailed horse running to the left. The animal's head, shoulder, and haunch appear as pellets within circles. The legend EI appears above, and sv below the horse. The creature is surrounded by four carefully positioned pellets, above, below, before, and behind.

Weight. 1.06 grams.

9. A coin tentatively identified as a silver piece of Bodvoc. Like no. 6 this coin appears to be a contemporary forgery. A red copper-looking core is clearly visible beneath the surface where the latter has flaked off. It is also considerably under weight, assuming that it is a silver coin of Bodvoc or indeed any Dobunnic silver issue. Both obverse and reverse are highly corroded which renders certain identification difficult.

Obv. This shows fairly certainly a bare, beardless head facing left, with a legend positioned in front of the face. The nearest parallels are the silver issues of Bodvoc or the silver coin of Cunobelin (Mack 215). The Bath coin seems to resemble the Bodvoc issue rather than the other, but the illegible inscription is of no help in this instance.

Rev. This too is inscribed, a feature unknown on a Bodvoc issue although something which does occur on the coin of Cunobelin mentioned above. The reverse is in poor condition, and as far as anything can be made of the design, it appears to be geometric rather than figurative, and is perhaps similar to the design on the reverses of the coins of Tasciovanus (Mack nos. 174 and 175). The reverse of this enigmatic coin does not in any case carry either the classic Dobunnic emblem, the horse, or the seated figure of Victory, which on the evidence of the obverse one might expect to find.

Weight. 0.53 grams.

THE GEOGRAPHICAL CONTEXT

Bath lies well within the southern limit of Dobunnic territory as inferred from the plotting of coin finds. While few Dobunnic coins have been recorded from Bath itself, the surrounding area has been a rich source, probably overweighted in relative importance by the discovery of the Nunney hoard. This contained five coins of class D, about 180 coins of classes E and F, 16 plus coins inscribed ANTED, and 27 with the legend EISV.

The boundary between the Durotriges and their northern neighbours was fairly certainly the Wylle valley, as Professor Cunliffe³ suggests, but in the vicinity of the city itself, the divide is less sure. The main weight of Durotrigian coinage lies well to the south of Bath, and a few isolated examples only have come to light in Dobunnic territory. No coins of type 319 have, as far as I can ascertain, been found previously in the lands of the Dobunni.

Gaulish minims are found infrequently in Britain, and I have not discovered a published example of this particular coin. It is perhaps relevant in this context to note that eight Esvios minims were found in the 1875 Jersey hoard.⁴

DATING

Examples of the Durotrigian coin were found in the Le Catillon hoard on Jersey. Allen⁵ deduces that the date of the deposit of these coins 'must be between Caesar's campaign against the Veneti in 56 B.C. and the completion of his campaigns in 51 B.C.' Since the coins of type 319 included in the hoard were in very fresh condition, it is possible that they were minted somewhere within this date bracket, but Allen's secure *terminus ante quem* is now the subject of some doubt. The Mack 319 quarter-staters were certainly in circulation very much later than this, on the evidence of the Holdenhurst hoard. This contained coins of type 319 in association with a number of Roman issues, the latest of which was dated to the final years of the Emperor Hadrian c. AD 138, which is generally assumed to be the date of deposition for the hoard.

As mentioned above, eight examples of the Esvios minim—the closest parallel to the Bath coin—were discovered in the 1875 Jersey hoard. S. Scheers⁶ considers that the Roman issues with

which these were associated provide an acceptable *terminus post quem* of 39 BC. The dating of the Dobunnic series is also somewhat approximate. Roman and Celtic issues were found associated in the Nunney hoard. From this grouping it can be inferred that the developmental sequence of the Dobunnic uninscribed silver issues classes B–F was complete by AD 41, a date provided by the latest Claudian issue. The Dobunnic oppidum at Bagen-don, founded in the early years of the first century AD, has a coin series which commences with class B. These two fixed points give some indication of dating, although any attempt at refinement within this chronological bracket is highly speculative.

Allen⁷ suggests that the coins inscribed ANTED and EISV, which correspond fairly closely in stylistic terms with classes E and F, were minted approximately within the decade AD 30–40. The Bodvoc coins, which mark a break in tradition, and are the most Romanized of the series, are generally regarded as the latest Dobunnic issue, minted a few years on either side of AD 43. It seems, however, that Dobunnic coins were in circulation well after the invasion, since at Hengistbury Head coins of classes C, F, I, ANTED and EISV were found in a late-first-century AD context.

THE DEPOSIT

The problem of the date of the deposit, whether Iron-Age proper or post-invasion, is an intriguing one. Matters are complicated by the fact that the archaeological deposit within the reservoir contained an amount of residual pre-Roman silt, most certainly indicated by the presence of Mesolithic material. It is hence possible that the Celtic coins may also be residual within the Roman context, and there are several reasons for thinking this to be the case. Six, and possibly seven, of the nine Celtic coins are within the area of contemporary circulation. All the coins with the exception of the forgeries are in fair, and some in very good, condition, which argues against lengthy circulation.

Other features of the deposition are, on present evidence, common to Romano-Celtic temples: the presence of forged coins and a degree of selection, which perhaps would explain the presence of the Durotrigian coin and the Gaulish minim, both foreign to the area. It should also be noted that the

³ B. W. Cunliffe, 'The Late pre-Roman Iron-age, c. 100 B.C.–A.D. 43', *VCH Wiltshire*, i (2), 435.

⁴ S. Scheers, *Traité de numismatique celtique, la Gaule Belgique* (Paris, 1977), ii, 886.

⁵ D. F. Allen, 'The Origins of Coinage in Britain: A Reappraisal', *Problems of the Iron Age in Southern*

Britain, ed. S. S. Frere (London, 1961), p. 297.

⁶ S. Scheers, *Traité de numismatique celtique, la Gaule Belgique* (Paris, 1977), ii, 886.

⁷ D. F. Allen, 'A Study of the Dobunnic Coinage', *Bagen-don: A Belgic Oppidum*, ed. E. M. Clifford (Cambridge, 1961), p. 97.

two last-mentioned coins are also potentially a rather earlier deposit than the rest of the Celtic group.

Currently there is no record of pre-Roman Iron-

Age activity at the site of the Baths, and in the absence of such evidence, the precise nature of the deposit must remain uncertain.

LYN SELLWOOD

THE FIND-SPOT OF THE ALRESFORD HOARD

IN about 1880 a hoard of gold coins of Verica was supposedly found near Alresford in Hampshire (NGR SU58.33). Notice of this hoard does not, however, seem to have reached the numismatic world until 1890, when Sir John Evans, into whose possession some of the coins had come, included the hoard in his supplement to the *Coins of the Ancient Britons*.¹ He mentioned a small hoard only, but in 1891 no less than sixty-four staters of Verica and four of Epaticcus were sold in the sale of J. W. Shaw of Alton, Hampshire, at Sotheby's, clearly the whole or part of a hoard. Evans bought some of these and marked on their tickets 'From the Alresford hoard' with or without a question mark afterwards, and subsequent scholars have treated the two sets of coins as part of the same hoard.²

The matter is further complicated by the doubts which exist over the find-spot of the hoard or hoards. In 1960 Derek Allen added a note to his conspectus of the principal hoards of Celtic coins found in Britain to the effect that two coins (a stater of Verica and one of Epaticcus) handed down in a local farming family suggested that the true find-spot of the so-called Alresford hoard may have been Bentworth, near Alton, Hampshire.³ Subsequently, however, Allen annotated his own copy of the article with the comment that Commander R. P. Mack, having interviewed the farmer, doubted this suggestion, which seemed to close the matter as far as he was concerned.

In the light of these doubts, the following letter from F. Jenkinson of Trinity College, Cambridge, to George Payne, the Kentish antiquary, which has recently come to light in Rochester Museum,⁴ is of no small interest.

April 4 1880

Dear Payne,

Four of the coins were lost by the delay. I had just time between trains to secure the rest and be off to town with them.

One was from Farnham:

1. Obverse: TINC

Reverse: A horseman

Three from Bentworth near Alton:

2 and 3. Ob: VERI—a leaf

R: A horseman CO.FL

4. Ob: A horseman above VIR below
REX

R: COM.F

I gave £5 for them. The last three in very good condition. The other fair. All are gold. . . .

The remainder of the letter deals with other matters. It was written from Sunninghill, presumably the Sunninghill, near Bagshot, Surrey. From the description of the coins, there seems little doubt that these are the four unprovenanced gold staters from Jenkinson's collection given to the Fitzwilliam Museum, Cambridge, in 1923.⁵

Unfortunately, the letter gives no indication of where the coins were bought. 'Town' is presumably London, but there is no way of knowing whether 'between trains' indicates a junction or the decision to leave a through train to purchase the coins and catch the next one. From the provenances, one would surmise that the coins were bought in Hampshire or Surrey, possibly at Sunninghill itself,⁶ although if Payne furnished the information they could well have been bought elsewhere.

The problem raised by the three coins from Bentworth is twofold. First, there is the question of

¹ Sir John Evans, *The Coins of the Ancient Britons* (1864, Supplement 1890), p. 509.

² For example, D. F. Allen, 'The Belgic Dynasties of Britain and their Coins', *Archaeologia*, xc (1944), 10 n. 7.

³ D. F. Allen, 'The Origins of Coinage in Britain: A Reappraisal', *Problems of the Iron Age in Southern Britain*, ed. S. S. Frere (1958), p. 296.

⁴ *Letters on Kentish Archaeology to George Payne FSA*, 1880, vol. 3, MS Rochester Museum. I am indebted to Tony Merson for drawing my attention to this letter.

⁵ *SCBI Fitzwilliam I nos.* 57 (Mack 96), 62 (Mack 121), 67 (Mack 125), and 71 (Mack 125).

⁶ Farnham seems a not unlikely candidate. The Tin-commius stater was actually found there, while the Verica stater from Bentworth in the Lewis collection is known to have been bought at Farnham on 17 Jan. 1880 (T. Volk, pers. comm.). This latter coin was presumably part of the same batch, and in view of the delay which Jenkinson alludes to, might even conceivably have been one of the four coins he missed.

whether these staters derive from a hoard. That this was indeed the case seems likely both from their similar condition and the fact that there is another stater of Verica (Mack 121) in the Lewis collection, Corpus Christi College, Cambridge, which is labelled as having been found at Bentworth in 1879, as well as the two coins in the farming family. Secondly, there is the problem of whether this hoard is one and the same as either Evans's hoard found near Alresford 'some years ago' or the hoard dispersed in the Shaw sale in 1891 or both. Unfortunately dies help us little here. Two of the Jenkinson coins are linked to Alresford coins only, but the third has links with both an Alresford and a Shaw coin. The Lewis collection specimen has no die-duplicates.⁷ There are several die-links between Alresford and Shaw coins, but in view of the very limited range of dies represented by the series as a whole, this can hardly be regarded as conclusive evidence that they were one and the same hoard. Moreover, Evans also acquired a coin which was found at Avington, near Alresford, in 1899, which is die-linked to an Alresford coin and could reasonably be regarded as a hoard stray.

It could be argued that as most of the provenanced staters and, in all probability, most of the unprovenanced staters as well, derive from the Alresford hoard or the Shaw collection, we have a far from representative sample of Verica's staters and thus that the die-links between the Bentworth coins and the other hoard coins are significant, but

against this one must point out that only four of the ten single finds known are not linked to *attested* hoard coins.

What then may one safely conclude? The Jenkinson coins, the Lewis specimen, and the coins in the farming family all strongly imply that a hoard was found at Bentworth in 1879. The fact that one of the family's coins was a stater of Epaticcus, and that Shaw lived at Alton, lead us to suppose that Bentworth was also the find-spot of the coins in his collection. Were it not for the single find from Avington, near Alresford, one would have little hesitation in further suggesting that the Alresford and Bentworth hoards were one and the same; as it is, the matter must remain open, although the coincidence of the only two hoards ever recorded containing staters of Verica having come to light at roughly the same time and only a few miles apart, is one that I would be most reluctant to accept.

In any event, it is clear that the commonly held estimates of the number of Verica's staters from the hoard or hoards, must be revised. The Shaw sale included 64 staters of Verica and 4 of Epaticcus, while by 1890 Evans seems already to have owned 13 staters of Verica from Alresford. To these must be added the 6 Bentworth coins, 5 of Verica and 1 of Epaticcus, making a total of 82 staters of Verica and 5 of Epaticcus, an interesting point when it is remembered that in all only 93 staters of Verica were traceable in 1976.

COLIN HASELGROVE

A HOARD FROM EARLY IN THE REIGN OF ÆTHELRED II FOUND AT SPETTISBURY RINGS HILL FORT, DORSET

MR D. A. HINTON has drawn our attention to the fact that the second edition of Hutchins's *History of Dorset* contains an account of what appears to have been a small hoard of coins of Eadgar, Edward Martyr, and Æthelred found at Spettisbury Rings in about 1790.¹ The range of issues represented brings the Chester hoard to mind, and the location near the coast suggests that the background to its concealment may have been the Viking raids along the south coast. Other hill forts were reused at much the same date, notably of course Cissbury and Cadbury.

W. G. Maton wrote in a letter dated from Salisbury on 28 November 1792 that 'the coins here engraved, which are of silver were found at

an entrenchment called Spettisbury Ring, adjoining to the village of the same name, which is distant about three miles from Blandford. A ploughman discovered them at the time when the ring was prepared for sowing, about two years ago. No. I [illustrated by a line-drawing which appears to be quite faithful, and from which the legends are transcribed below] was plainly a penny of Eadgar (EADGARREXANGLON); the coiner's name on the reverse seems to be Wynstan (+PYNSTANΠOTOTTA) . . . No. II (after a most diligent examination . . .) I have every reason to conclude is a penny of Edward the Martyr (+EADPEAPDREXAN); on the reverse the legend is clearly +PVLFCARMOSTANIF . . .

⁷ D. F. Allen and C. C. Haselgrove, 'The Gold Coinage of Verica', *Britannia*, x (1979), 1-17.

¹ J. Hutchins, *History of Dorset* (2nd edn., 1796-1814),

iii. 136. The text of the note, but not the illustrations, is repeated in the third edition.

A coin of Ethelred the second, in as fine preservation as the two above described, was found likewise at the same place, but some time after. That however is not in my possession.¹

The possibility of three or even two separate losses cannot be altogether ruled out, but it seems remote, and it is likely therefore that we are considering a hoard. The three coins referred to would seem to be all that came to Mr Maton's attention: they aroused his interest to such a degree that he would doubtless have mentioned the existence of other specimens if he had heard of them, even if he had not seen them. It is possible, of course, that the plough scattered the hoard, and that not all of it was recovered.²

But if Maton heard about the discovery only at second hand, and perhaps even after an interval of up to two years, one cannot be certain that other coins may not have been dispersed. We have wondered whether the group of four coins all of the Reform/First Small Cross type, three of Edward, and one of Æthelred, which apparently came from near Wimborne (only a few miles from Spettisbury)³ could have been from the same source, having lain in private possession locally for many years—or alternatively whether they might represent another small Dorset find concealed in the face of the Viking threat to the south coast. But the northerly mint-places of the four coins, and the similarity of three of them to coins now missing from the Willes parcel,⁴ may argue for their having

come to light in the Oakham hoard of 1749. This hypothesis involves an even longer period during which the coins had 'gone to earth'. And northern coins could very quickly reach the south coast—as the Spettisbury Rings hoard now demonstrates.

The Totnes moneyer Wynstan in Eadgar's Reform type is known to modern numismatists only by the specimen which was in the Montagu collection. It was described there as unique.⁵ It could well be one and the same as the Spettisbury Rings coin.

Wulfgar is a very well-attested moneyer during the reign of Edward the Martyr. A dozen specimens are known, and it is difficult, therefore, to identify the Spettisbury Rings find today.

As the coin of Æthelred was not described we cannot be sure whether it was of the First Small Cross type, or whether (as in the case of the Chester hoard) coins of the first validity-period after the reform were still in circulation alongside the early issues of the Hand type. It is tempting to consider that in 982, according to the Chronicle, three Viking ships arrived in Dorset and ravaged in Portland. One can very rarely be certain of the circumstances in which any one particular hoard was concealed; but in any case, English hoards are our only direct evidence for the composition of the English currency in Æthelred's reign, and there are so few of them that even these few crumbs of information from Dorset seem worth reinstating.

D. M. METCALF and KENNETH JONSSON

THE DIES OF EDWARD V'S SILVER COINS

UNTIL 1895, when Montagu¹ made the (entirely subjective) proposal that sun-and-rose dimidiated was more likely to be a mark of Edward V than of his father, the rare coins with this initial-mark had generally been assigned to Edward IV. In reviving this attribution Mr Blunt used the evidence of dies and mint accounts to argue that the surviving sun-and-rose coins represented too substantial an issue to correspond with the tiny totals of bullion which passed through the mint in May and June 1483, but the much rarer Edward coins with the boar's-head mark could well fit this period.² Blunt published

a pair each of Edward angels and groats struck before and after the obverse die had been altered from sun-and-rose to the boar's head. The latter was the personal mark of Richard of Gloucester, who was appointed Protector on 5 May and deposed Edward V on 26 June. Blunt's suggestion that the sun-and-rose mark was used for the last issue of Edward IV, following an indenture made with a new mint-master on 12 February, was incorporated in the chronology of his later work with Whitton on the coinage of Edward IV.³

Whitton soon pointed to further cases of dies

¹ In Sweden many hoards have been found bit by bit over a period of decades.

² M. Dolley, 'A Further Parcel of Reform-type Pence from an Eighteenth-century Find from N.E. England', Spinks, *Numismatic Circular*, lxxxiv (1976), 141.

³ C. E. Blunt and C. S. S. Lyon, 'The Oakham Hoard of 1749, Deposited c. 980', *NC* xix (1979), p. 117, item k.

⁴ Sotheby, 18 Nov. 1895, lot 730.

⁵ H. Montagu, 'The Coinage of Edward V', *NC* 1895,

p. 117. For a summary of the controversy see I. Stewart, 'Mintmark Sun and Rose—Edward IV or V?', Seaby's *Coin and Medal Bulletin* (1954), 507–9.

² C. E. Blunt, 'The Coinage of Edward V with Some Remarks on the Later Coins of Edward IV', *BNJ* xxii (1934–7), 213–24.

³ C. E. Blunt and C. A. Whitton, 'The Coinages of Edward IV and of Henry VI (Restored)', *BNJ* xxv (1945–8), 13–14, 299, 303–4, and 325–7.

similarly altered, remarking that, since the dies of all the Edwardian boar's-head angels and groats were also known from coins with sun-and-rose as the original mark, it seemed possible that no new dies were prepared for Edward V.⁴ He commented that the groats were from four obverse dies, three without and one with a pellet below the bust. In their subsequent work on Edward IV, Blunt and Whitton listed eleven varieties of type XXII (sun-and-rose) groats, nos. 1-5 with fleur on breast and pellet below, nos. 6-9 without pellet, and nos. 10-11 without fleur or pellet; adding the comment that 'nos. 1, 6, 7, 8, and 10 are also found with the obverse I.M. overstruck with the Boar's Head'. The implication of this statement is that five sun-and-rose obverse groat dies, including all three varieties, are also known with the mark altered to boar's head, but this does not appear to be the case. Blunt and Whitton nos. 6, 7, and 8 seem to be from the same die (*a*), which develops characteristic flaws between the circle and tressure under EDW and above the fleur at the right shoulder; most of the known Edward V groats are from this die. Blunt and Whitton no. 1 is the only type XXII die (*c*) with the pellet below the bust that has been noted also with boar's head. I have not been able to trace any boar's-head groat from the same die as no. 10, or indeed any Edward V groat at all without a fleur on the breast.⁵ However, it may be that '10' was a slip for '9' since the die of type XXII no. 9 (Parsons 1929, lot 393) does appear to be known from a

boar's-head coin (Baines 1922, lot 34); it can be identified by a small nick in the die just to the left of the top of the breast fleur. Both these coins are reproduced on Pl. IX, 10, 11 from the sale-catalogue illustrations. I have not noted any other examples from this die (*b*), either before or after alteration of the mark.

Details of groat obverse dies involved may be summarized as shown below.

Only one half-groat is known of this period. Brooke comments that the mark is doubtful,⁶ but Blunt has noted a reverse die-link with Richard III which reinforces the likelihood of it being a boar's head.⁷ In my view there is no real doubt about this, or about Blunt's identification of the same mark on a London penny.⁸ I have not been able to trace the sun-and-rose penny that belonged to R. Carlyon-Britton, but that in the Hunterian Museum, Glasgow,⁹ is here illustrated for the first time (Pl. IX, 12). The dies differ from those of Mr Blunt's Edward V penny, but the characteristic broken cross-end punch is to be noted on the reverse of both coins. Mr Blunt has recently drawn attention to a note by William Webster, the mid-nineteenth-century dealer, which reads 'Edw. V Penny m.m. boar's head. I have seen, but *very poor*'. As Mr Blunt remarks, it is doubtful whether the mark on his coin would have been identified correctly at that date, and Webster's note could refer to a second specimen.¹⁰

As to the question of attribution, part of Mr

Die	Features	Mark	Whitton, BNJ xxiv	Blunt and Whitton	Examples
<i>a</i>	Fleur on breast; no pellet below. Barred A. Flaws at top of tressure and by fleur on right shoulder.	S.R.	1, 3, 6	6, 7, 8	BM (BNJ xxii, pl. no. 7); Morrieson 210; Murdoch 371; Lockett 3174.
		B.H.	2, 4, 5, 7		BM (ibid., no. 8); Wheeler 276 <i>ex</i> Roth i. 228; Ryan 959 (? <i>ex</i> Walters 1913, 461); Lockett 3175; Larsen 106; C. E. Blunt (2).
<i>b</i>	Fleur on breast (with small nick at top left); no pellet below. Barred A.	S.R. B.H.	— —	9	Parsons 393 (pl. IX, 10). Baines 34 (Pl. IX, 11).
<i>c</i>	Fleur on breast; pellet below. Unbarred A.	S.R.	8	1	Wheeler 275.
		B.H.	9, 10		BM (Brooke, pl. xxxv. 1); Lockett 1649 <i>ex</i> Walters 1932, 356 (? = Dawney 51).

⁴ C. A. Whitton, 'Die Links between Edward IV, Edward V and Richard III', *BNJ* xxiv (1941-4), 175-8.

⁵ In the 1932 Walters sale lot 359, under Edward V, consisted of two groats, one sun-and-rose without fleur on breast, and the second described as 'another, with m.m. boar's head, in fair state, broken'. Although this could be read to imply that the boar's-head specimen also lacked a fleur on the breast, to do so would probably be to assume too high a degree of precision on the part of the

cataloguer in his use of the word 'another'.

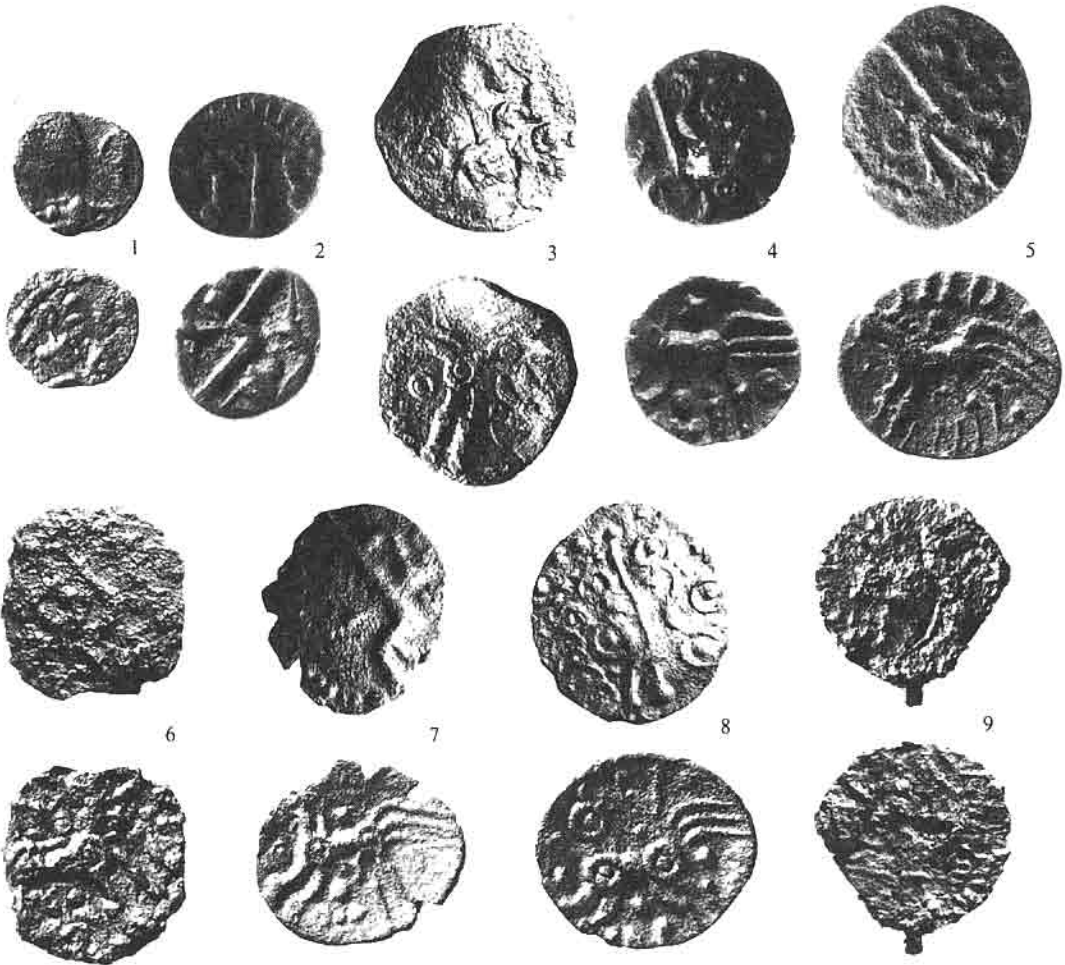
⁶ *English Coins*, p. 150.

⁷ *BNJ* xxii (1934-7), 221 and pl. nos. 9-10.

⁸ *Ibid.*, pl. no. 12.

⁹ I am indebted to Professor Anne Robertson, then Keeper, for the photographs.

¹⁰ C. E. Blunt, 'Grangerized Copies of Ruding's *Annals*', Spink's *Numismatic Circular*, lxxxiv (1976), 226-7.



SELLWOOD: BATH



Blunt's original argument was that there were too many sun-and-rose obverse dies for angels to be compatible with the minimal amount of gold minted in May and June 1483. The theme was developed by Stubbs, who suggested that the numbers of obverse dies with this mark and with boar's head for both angels and groats corresponded remarkably to the proportions of gold and silver bullion minted respectively in February–April and May–June 1483.¹¹ Borrowing from Blunt and Whitton's list, Stubbs compared the figures for groat obverse dies, six with sun-and-rose only and five with both sun-and-rose and boar's head, with silver bullion of 573 lb. in the former period and 434 lb. in the latter. Since the five dies that were altered produced some groats with their original mark, more than six-elevenths of the output of the eleven dies would probably have had the sun-and-rose mark (an inference supported by the fact that boar's-head Edward groats are substantially rarer than those with sun-and-rose). This thought seems to underly the observation by Stubbs that not all the unaltered sun-and-rose coins necessarily belonged to the reign of Edward IV.

The point is reinforced if the proportion of altered groat dies is reduced to one-third (three out of nine). Assuming that the introduction of the sun-and-rose mark is correctly dated to February 1483, the bullion figures would then suggest that a good deal of the May–June coinage may have been struck from unaltered sun-and-rose dies. The total number of sun-and-rose obverse dies needs to be rechecked before any more precise estimate could be attempted and, in order to protect against the effects of unequal die-output where so few are involved, the actual numbers of surviving specimens with each of the two marks ought also to be counted. But such information seems unlikely to disturb the conclusion that, while the bulk of the sun-and-rose coinage must be attributed to Edward IV, the dies were not altered immediately when minting was resumed for Edward V. Perhaps that happened a little later when Richard as Protector had tightened his hold.

I am most grateful to Mr Blunt for many helpful comments on the foregoing.

IAN STEWART

CROWNED LEOPARD'S HEAD WITH COLLAR¹

IN his work entitled 'The Coinage of Edward VI in His Own Name',² Potter deals with the last secondary mark on the 6 oz. shillings. Owing to the great rarity of this particular mark, Potter tentatively describes it as 'pelt', or martin's skin outstretched. The mark is only found on the 6 oz. issues (6 oz. silver, 6 oz. alloy) and all known specimens are dated MDL. Of the four examples that I have examined two are muled with 'martlet' on the obverse from the same dies. The other two, which are die-duplicates, are the same as the Potter coin with 'pelt' on both sides.

Comparison of weights is as follows:

1. Mule, 80.7 grains. British Museum.
2. Mule, 83.2 grains. R. Lax.
3. Pelt? *Obv.* and *Rev.* 61.9 grains. British Museum.
4. Pelt? *Obv.* and *Rev.* 77.8 grains. J. Bispham.

Although the coins vary in weight it seems that they were an attempt at the 80-grain issues. Coin no. 4 which was auctioned by Glendining & Co. on

22 November 1979, lot 247, will, I hope, solve the question of this mark. The obverse (Pl. X, 1) has much wear, as do most examples of the mark, but the reverse mark (Pl. X, 2) is well struck up so enabling a positive identification to be made. The mark was made with three punches and four blows of the hammer and is, I believe, crowned leopard's head with collar. As the enlarged photograph of the mark (Pl. X, 3) shows, the last blow, putting in the second v to make up the collar, was struck on the side. This had the effect of pulling down one side of the v punch and causing a burr to occur at the side of the w mark. Miss Marion Archibald of the British Museum consulted Dr Swan, York Herald, about the mark at the base of the leopard's head with the aid of the photographs, but it was his opinion that the mark was numismatic rather than heraldic. He went on to suggest that the mark could be the erased throat of the leopard although this was usually shown clean cut at the base of the head in heraldry.

I was at first of the opinion that the mark below

¹¹ F. M. Stubbs, 'Edward Coins with Obverse Mint-Mark Sun and Rose Dimidiated', *BNJ* xxx (1960–1), 193–5.

¹ I would like to acknowledge help given by Dr C. E.

Challis and Mr R. Lax.

² W. J. W. Potter, 'The Coinage of Edward VI in His own Name', *BNJ* xxxi (1962), 125–37.



1



2



3

the leopard's head was the initial-mark of the under-treasurer at whose mint the coin was struck, but no such official had a name beginning in w. The only person it could have applied to was Warwick who headed a commission with Sir William Herbert and Sir Walter Mildmay in 1550,³ the year when the shillings were minted, to examine the accounts of the principal mint officials who were responsible for producing the debased coin. But Warwick's crest, a bear with a ragged staff, was nothing like the mint-mark under consideration here and, in any case, as far as we know coins were marked by the heads of the mints and no one else.

At this point it would be beneficial to discuss the martlet issues to see whether they can throw light on this intriguing mark. The martlet has on occasion been attributed to Thomas Fleetwood because of his position as under-treasurer during Elizabeth I's reign. However, although he had undoubtedly attained high office under Edward VI, as assaymaster and comptroller, he had not by then become head of a mint and, for the reason just given in connection with Warwick, was thus unlikely to have had any say as to the choice of martlet at this time.

Because coins with martlet mark have long been known, the mark must be connected with one of the four London mints issuing debased coin during Edward's reign; Tower I, Tower II, Southwark, and Durham House. The heads of these mints and the marks usually attributed to them in so far as the debased issues are concerned are as follows:⁴

	<i>Under-treasurer</i>	<i>Mark</i>
Tower I	Sir Martin Bowes 25 March 1544–29 September 1550	Arrow, Pheon, Swan
	Sir John Yorke 29 September 1551–25 March 1552	Y
Tower II	Stephen Vaughan February 1548–25 December 1549	Grapple
	Nicholas Throckmorton 25 December 1549–25 March 1552	?
Southwark	Sir John York 25 March 1545–29 September 1551	Y
Durham House	John Bowes 2 December 1548–October 1549	Bow

As may be seen, hitherto numismatists have been able to assign specific marks to each of the under-treasurers with the exception of Sir Nicholas Throckmorton, and it would be my contention that we should now go one step further and assign the martlet mark to him. As the fourth son of Sir George Throckmorton of Coughton, Warwickshire, he would have been entitled to use the mark as a mark of cadency. The use of the martlet to denote the position of the fourth son was standardised in the early part of the sixteenth century.

If this attribution be correct, then the mark with which it is muled must also be attributed to the same mint. In my view, therefore, the mint-mark which Potter termed 'pelt', but which I prefer to call 'crowned leopard's head with collar' came from Tower II in 1550 when it was headed by Sir Nicholas Throckmorton.

J. BISPHAM

MORE ON THE TOWER SHILLINGS OF CHARLES I

SINCE my paper on this series,¹ three further pieces have come to light which warrant recording. The first, an exciting discovery which appeared in auction,² is a mule of a Group B5 obverse with a Group C5 reverse (Pl. XI, 1). It is the first mule between groups to be recorded and is a further reflection of the somewhat complicated transition between Groups B and C.

The other two coins are both of Group F and provide previously unrecorded instances of mint-mark for type. One is a coin of type F2/1 and the other of type F5/1. The former (Pl. XI, 2) has mint-mark anchor, flukes to right, over tun on the obverse and anchor, flukes to left, on the reverse. Assuming the overmark indicates this to have been

a late tun obverse, the presence of the large mark of value would seem to provide final confirmation that this followed the use of the smaller mark of value with this obverse type, hitherto known only with the tun mark. The F5/1 coin (Pl. XI, 3) has the anchor mark with flukes to right on the obverse and vertical anchor on the reverse. The vertical anchor is commonly encountered on F3 coins but is so far unrecorded on an F5 obverse. It seems reasonable, therefore, to conclude that a reverse die used with the earlier F3 obverse was subsequently reused with this F5 obverse. This coin was said to have come from the Messing hoard (1975).

M. B. SHARP

³ H. Symonds, 'The English Coinages of Edward VI', *BNJ* xi (1915), 143.

⁴ C. E. Challis, 'Mint Officials and Moneyers of the Tudor Period', *BNJ* xlv (1975), 51–76.

¹ 'The Tower Shillings of Charles I and their Influence on the Aberystwyth Issue', *BNJ* xlvii (1977), 102–13.

² Spink Coin Auctions no. 11, 8–9 October 1980, lot 200.



1



2



3



4

SOME UNPUBLISHED COUNTERMARKS ON COPPER COINS

SINCE my book *British Countermarks on Copper and Bronze Coins* appeared in 1975 many unrecorded pieces have turned up. The vast majority of these are countermarked names or initials without trade or town. While these are worth recording, not many are of much significance. A few traders'

items, mainly shop tickets, have come to light. Twelve of these, typical of the pieces concerned, are described in the table below. There follow some brief notes giving background information on some of the issuers, based largely on research in local directories.

<i>Countermark</i>	<i>Incuse (I) or in relief (R)</i>	<i>Obverse (O) or reverse (R)</i>	<i>Coin type</i>	<i>Source reference author's collection (A) other private collection (P)</i>
Berkshire				
BUTLER/READING/LOTT/READING Small (1 and 2) and medium (3 and 4) letters with serifs	I	O	Penny 1797	A
Cornwall				
R·HAY/CRAFT/TRURO Very small letters with serifs	I	R	Canada halfpenny token 1812 (Charlton 219)	A
Kent				
vs/MAR/1831 Medium letters with serifs	I	R	Irish halfpenny 1805	P
London				
J·BUCK/124·NEWGATE·ST/ LONDON Medium letters with serifs	I	O	Penny 1797	A
READ THE PENNY SUNDAY TIMES (curved) Medium letters with serifs	I	O	Penny 1861	A
WILTSHIER/8 LONG LANE/(rosette) Small letters with serifs	I	O	Halfpenny 1806/7	A
Northumberland				
W·HUNTER/MORPETH/MORPETH Medium (W. HUNTER) and small letters with serifs	I	O R	Penny 1797	A
Surrey				
* GLAYSHER * (curved)/GUN· MAKER/GUILDFORD (curved) in an oval indent Small letters with serifs	R	O	Counterfeit halfpenny 1751	A
Unattributed				
LEIGH in crescent-shaped indent. Medium plain letters	R	O	Halfpenny George II	A
V (crown) R/OWEN & CO Small letters with serifs (also crude dotted 1 obv., C rev.)	I	O	Penny 1797	A
WL & H/SARGANT/SARGANT & SON/ WARRANTED (curved) (elephant standing, facing right). Medium serified italic (1, 2), small serified italic (3, 4), medium letters with serifs (5)	I	O R	Penny 1825	A
WILL WAGNER/ODESSA Small letters with serifs	I	O	Halfpenny 1806/7	A

Notes on issues

BERKSHIRE

Reading

Butler, Lott

Charles Butler was a cutler in Fisher Row (1824), 28 Middle Row (1830), and 21 London St. (1847-8). Ewell Lott was a gun maker in Minster St. (1824).

The piece is presumably a shop ticket (repair or discount check) dating from the 1820s.

CORNWALL

Truro

Haycraft

James Haycraft, cutler, St. Mary's Street, is listed in the Post Office Directory for 1856. I have found no trace of R. Haycraft in Pigot's Directories for 1824, 1830, or 1844.

KENT

Sheerness

Sheerness Dockyard

Similar pieces, with countermarks in relief, and dated JAN 1841 and JUN 1845, are recorded in my book (nos. 18.8A, B), and are tentatively attributed to Sheerness Dockyard. They are assumed to be stores' checks. The dockyard opened in 1814 and by 1900 covered 60 acres and contained 3 basins and 5 docks.

LONDON

Buck

Joseph Buck, tool maker, is listed in directories as follows:

1826-7 1 Gibson St., Lambeth

1832-4 1 Waterloo Rd., Lambeth, and 245 Tottenham Court Road

1838 3 Gt. Waterloo St., Lambeth

1839-67 124 Newgate St., and 1 Waterloo St. (1842), 91 Waterloo Road (1845-54), 164 Waterloo Road (1867)

1875 Holborn Viaduct, EC, and 164 Waterloo Road

1922 56 Holborn Viaduct, EC1

Penny Sunday Times

This is apparently not Lloyd's *Penny Sunday Times* (no. 22.28A in my book), which is earlier (1846-7). On a penny of 1861, such a countermarked advertisement ticket would have been illegal. (Act to prevent the defacing of the current coin of the Realm 1853—16 & 17 Vict. c. 102.)

It is not clear which newspaper was responsible. *The Penny Times* (London) was started on 22 February 1860, while *The Sunday Times Racing Record and Handicap Book* (London) also first appeared in 1860. *The Sunday Times*, founded in 1822, cost twopence in the early 1860s.

Wiltshier

Jonathan Wiltshier, cutler, was at 8 Long Lane, Smithfield, 1832-47. By 1850 George Henry Matthews, cutler, was at the same address. Wiltshier was at 20 Crescent Street, Euston Square, in 1854.

NORTHUMBERLAND

Morpeth

Hunter

William Hunter, blacksmith, Scotch Arms Yard, is listed in Pigot's *Directory* for 1828-9. He would be a more probable issuer than others of the same name—a confectioner in Bridge St. and a baker and flour dealer in Thompson's Buildings.

SURREY

Guildford

Glaysher

There is no Glaysher on the mark plate of the Gunmakers' Company, nor is there any trace of him in directories for 1784, 1798, 1826-7, 1832-4, 1839, 1845, 1851, 1855. Three Glayschers are listed in the Guildford Almanac for 1873, one a dressmaker, and the others at private addresses.

UNATTRIBUTED

Leigh

The mark is distinctive, but there is no clue as to trade or location. A gunmaker is a possibility.

Owen & Co.

This could well be a cutler's mark. Owen, Boon & Co. were working gold- and silversmiths at 11 Thavies Inn, London, in 1857.

Sargant

No trace has been found in Sheffield Directories for 1787, 1797, 1828, 1837, 1845, or 1877.

Wagner

Wagner was probably engaged in the tool-making or cutlery trades—at Odessa Works in some as yet unidentified town rather than in the capital of the Ukraine!

No trace has been found in Sheffield Directories for 1787, 1797, 1828, 1837, 1845, or 1877.

GAVIN SCOTT

REVIEWS

Sylloge of Coins of the British Isles 26 Museums in East Anglia. Part I. The Morley St. Peter hoard (including coins in the British Museum). Part II. Anglo-Saxon, Norman, and Angevin coins and later coins of the Norwich mint. By T. H. McK. CLOUGH. London, for the British Academy, 1980. xvi + 189 + (1) pp., 52 plates.

BOTH parts of this volume will be of considerable interest to numismatists. The Morley St. Peter hoard, discovered as long ago as 1958 and here for the first time published in full, comprises 883 coins of which as many as 763 are in the name of Eadweard the Elder (899–924). Of these the great majority are of a variety with Eadweard's name and portrait which Mr Clough is confident was the product of a local minting organization active in East Anglia between Eadweard's reconquest of the area shortly before 920 and Eadweard's death in 924. They certainly originate from a common source, for Mr Clough has recorded many die-links within this grouping and can show that the coins share distinctive features of style and lettering. Indeed, the coherence of the grouping is such that despite its obviously derivative character—the coins imitate regular issues of Eadweard struck outside East Anglia—Mr Clough is able to write (pp. 5–6): 'everything suggests that the coins were struck not by a bunch of incompetent enthusiasts but by a small group of organized and skilled moneyers'. He offers no suggestion as to why, if that were the case, the moneyers' names that the coins carry are copied from those of London and non-East Anglian moneyers rather than being the names of indigenous East Anglian moneyers; but the explanation may well be that, when Eadweard's influence became dominant in East Anglia, local moneyers entrusted with the striking of a coinage in Eadweard's name did not think to place their own names on the coins' reverses, as that had not been local practice in the latter phases of the St. Edmund coinage which these new coins replaced.

On one occasion only does Mr Clough enter the lists on a matter of numismatic controversy. Whereas Mr Blunt, writing in 1974, suggested that the issue in East Anglia of the imitative portrait series in Eadweard's name might have continued well into Æthelstan's reign, as there is otherwise an apparent gap in East Anglian issues until the introduction of Æthelstan's Crowned Bust type in

the 930s, Mr Clough, basing himself on the compact nature of the imitative portrait coins, sees their issue as being effectively terminated by Eadweard's death in July 924. In taking this line he is strongly supported by the fact that the hoard contained one coin only in Æthelstan's name, on a *prima facie* level at least clear evidence that the hoard was deposited within the first year or eighteen months of Æthelstan's reign, and thus that its total content is to be dated before the mid 920s. It does not necessarily follow from this that all imitative portrait coins in Eadweard's name were struck before c.925, for the Morley St. Peter hoard would be evidence only for a pre-925 dating for coins from dies represented in it; but in fact, although Mr Clough does not make the point quite this clearly, those imitative portrait coins known that do not derive from Morley St. Peter are nearly all from dies represented in the hoard, and the few that are not from such dies do not add up to being examples of a coinage prolonged into the later 920s, let alone the 930s.

It is a pity that Mr Clough, having expressed himself so definitely about the duration of the Eadweard imitative portrait type and on the date of the hoard's deposit, has neither discussed the hoard's other contents nor grappled in any way with the consequences of his rejection of Blunt's suggestion that the striking of the portrait type extended beyond Eadweard's death. If there was no Eadweard portrait coinage being struck in East Anglia in Æthelstan's reign, what coins were struck in East Anglia between c.925 and the date around 933 when coins of Crowned Bust type with the Norwich mint-signature first occur?

In this context one feature of the hoard not emphasized by Clough deserves mention. Alongside the mass of imitative portrait coins there is a much smaller group of coins imitative of Eadweard's Two Line type, which, like the imitative portrait grouping, were evidently the product of a single minting organization. It is this reviewer's belief that they too are of East Anglian origin—several reverse dies, e.g. those dies which have three groups of three pellets instead of only one group of three pellets in the position above and below the reverse inscription, appear to be directly derivative from reverse dies of the imitative portrait grouping rather than from reverse dies of the regular Two Line type—and that in itself would challenge

Blunt's view that only coins of portrait type were struck at East Anglian mints after c.920. But if there was a coinage not of portrait type but of Two Line type in East Anglia early in Æthelstan's reign it is elusive, for Blunt's *North Eastern I* grouping of coins of Æthelstan's Two Line type seems to derive from mints in the East Midlands rather than from East Anglia, and there is no other obvious grouping of Two Line type coins of Æthelstan that can at present be considered East Anglian. There the problem must rest for the moment.

Turning to the rest of the coins in the volume, the most important group to notice is a series of no fewer than 131 coins of the Norwich mint which was given to the Norwich Castle Museum in 1935 by H. M. Reynolds of Lowestoft. The Ipswich collection's main ingredient is a group of coins of the Ipswich mint acquired in the 1930s in ones and twos from W. C. Wells.

It is not possible to survey the coins in this part of the volume in detail, but specialists in the Anglo-Saxon, Norman, and Angevin series will find much to digest, especially perhaps in the area William II-Stephen. Here this reviewer will confine himself to pointing out that the 'Revd. R. Wilson', noted as the donor to Norwich Castle Museum in 1835 of coins of the first four types of Eadweard the Confessor without further provenance, must surely have been the Revd. and Hon. Robert Wilson, second husband of the Mrs Sheppard on whose first husband's estate the Thwaite, Suffolk, hoard of 1832, embracing these very types, was found. The five coins in question can thus be assigned a Thwaite hoard provenance. It also seems probable that two further coins of Eadweard the Confessor's Small Flan type derive from the Thwaite hoard; these were given to Norwich in 1832, the year of the hoard's discovery, by W. S. Fitch, the Ipswich postmaster.

H. E. PAGAN

Danefae: Til Hendes Majestaet Dronning Margrethe II, 16 April 1980. Edited by P. V. Glob. København, 1980. 200 pp. Illus.

THIS volume was prepared to celebrate the 40th birthday of Queen Margrethe II who, since her childhood, has evinced a keen interest in archaeology. The editor had the happy idea of illustrating a selection of the 'treasure' found on Danish soil in the lifetime of Her Majesty. Eighty-five pages of colour photographs have printed opposite a summary, in both Danish and English, of the relevant finds. The arrangement in order of date of discovery

means that, as one turns the pages, the whole range of archaeological objects comes under review. No less than one-third of the entries are of particular interest to numismatists, their intrinsic benefit in this context being to remind us of the differing functions of coins and the various ways in which they have come down to us. The point when coins ceased to be bullion and became money was very late in Denmark, enabling us to see the transition (no. 18 has a discussion). Too often in this country we seize on the Anglo-Saxon content of a Viking-age hoard and ignore the rest of the find: no. 42 puts the 'British' contribution into perspective, and incidentally casts further doubt on the rigid dating of the sexennial change theory. From a later period, the gold hoard of coins of Edward III from a wrecked ship (no. 78) perhaps gives a better glimpse of the currency—with 74 nobles, 30 half-nobles, and 5 quarter nobles—than do savings hoards of nobles found on English soil. The original owners of hoards can seldom be identified, but here one can: Jacob Pomeier (c.1607-1683) whose hoard was deposited in about 1658 (no. 83).

This book can give subtle insights into many aspects of hoards and currency, as might be expected from the names of the writers of the individual articles, such as Fritze Lindahl, Kirsten Bendixen, and Jorgen Steen Jensen. The juxtaposition of all periods is especially valuable to the over-specialist. A Danish legal requirement which might well be adopted over here with some advantage is to sieve the earth underneath the floors of churches when they are undergoing repair or alteration. Ten thousand coins have been recovered from less than 400 Danish churches in 25 years by this practice, mostly representing casual losses over 800 years (no. 42). Despite its coffee-table format, many numismatists could with advantage shelve it alongside ostensibly more weighty tomes.

J. D. BRAND

British and Irish Tokens Journal. Vol. 1, No. 1. August 1980. Edited by FRANCIS HEANEY. Pp. iii + 50. Illustrations in text. Dublin. Ir. £3.

WITH the apparent sad demise of the Token Corresponding Society's *Bulletin*, it is most pleasing to note the appearance of a new journal devoted to this aspect of numismatics which, it is intended, will appear at regular intervals.

Under the editorship of Francis Heaney, a small group of numismatists well known in the field of

token study have been enlisted to form an Editorial Board, while special consultants have been requested to read and comment on papers which cover research within their own fields of interest.

Contributors to the first number are Andrew Anderson ('The London & Newcastle Tea Company in Scotland'), Colm Gallagher ('Post Restoration Irish Tokens: a Documentary Perspective'), E. J. Priestley ('Shropshire Public House Tokens'), and Neil Todd ('What is a Tavern Token', and 'Research Notes on London & Provincial Market Tallies').

Of these, the article by Gallagher is of prime importance, bringing as it does a fresh conspectus to the use of seventeenth-century tokens in Ireland. The author points out instances of tokens being issued by individuals in whose activities small coin transactions would scarcely arise, the suggestion being that the issuing of some such pieces was a form of quasi-banking transaction or speculative venture—certainly a different assumption to that generally held for this series.

Todd discusses the widespread use of pieces which have in the past been collectively described as tavern tokens, and memories of the use of such items by two individuals early this century are recalled. In addition, he has compiled, with help from other collectors and enthusiasts, a series of notes on London and provincial market tallies, a subject which has yet to receive an exhaustive study. It is the intention to produce a catalogue of these pieces in serial form in future numbers of *BITJ*. A start is made with a list of those who issued tallies in Billingsgate, Borough Market, Covent Garden, and Spitalfields.

The other two articles are comprehensive enough to be regarded as new references for the particular series discussed. E. J. Priestley, Curator of the Clive House Museum, Shrewsbury, catalogues Shropshire public-house tokens, together with a list of sources, and some illustrations, which unfortunately have not reproduced very well: and Andrew Anderson lists the comprehensive range of tokens authorized by the London & Newcastle Tea Company in Scotland, and the addresses of the different branches of issue in each town.

With a stated emphasis on numismatics, while at the same time encouraging expository work in history and sociology, it would seem that the first issue of *BITJ* has set a balanced and professional standard, and this purely voluntary development deserves to succeed.

P. J. P. MORLEY

The Building Medalets of Kempson and Skidmore, 1796-1797. By R. C. BELL. Frank Graham: Newcastle-upon-Tyne, 1978. 184 pp., 342 illustrations in text. £15.

THIS book is the fifth volume in Mr Bell's series dealing with the tokens of the late eighteenth and early nineteenth centuries. His arrangement of that diverse body of tokens and token-like pieces (the undifferentiated mass of Dalton and Hamer, for example) into logical groups of like nature and origin has been a helpful exercise in classification and clarification; and not less so in the present case, for these building medalets are a thing of their own kind, and not really tokens in any sense. They form a distinct group, and benefit from being treated as such.

Mr Bell's books are of course largely a resuscitation of the 'Bazaar' articles of the 1880s, to which he is much indebted for his system of classification, and, in the present book, for the great bulk of the text describing the buildings. These historical and architectural accounts are nicely done in a light way, and contain much of interest; and certainly a knowledge of the buildings helps in our appreciation of the medalets themselves. The material, however, would have benefited before reusing from some degree of revision, updating, and correction. Little of this has been done, and regrettably its errors have been perpetuated.

Numismatically it cannot be said that the book makes much original contribution to our knowledge or judgement. With certain readers it will no doubt be valued as a convenient and fully illustrated guide to these pieces, and perhaps no more than that was intended. Although various numismatic remarks drawn from earlier writers are scattered through the text the sources are nowhere named or acknowledged. It is an unfortunate fact that the literature of the tokens of this period has suffered progressively from the careless reiteration of unsubstantiated remarks, and it is sad to see that Mr Bell has done nothing to stop this rot. Most disappointing perhaps is the lack of original thought or comment on a host of topics which must occur to the curious reader: on such subjects as the purpose and history of these pieces, the selection of the buildings portrayed, and so on. The introduction to the book scarcely deserves the name, and we are left with the impression that Mr Bell, who obviously has much to tell us when he feels so inclined, is here sparing himself the trouble.

T. STANTON

L. FORRER, *Biographical Dictionary of Medallists*. Reprinted by A. H. Baldwin & Sons Ltd., London, and A. G. van der Dussen, Maastricht, the Netherlands, 1979-80. 6 vols. + 2 vols. supplement. Illustrations in text.

THIS is a most welcome reprint because, unlike its predecessor, it reproduces the revised edition of the first volume so at last making this invaluable work easily available in its entirety. The quality of the reproduction of the text and of the line illustrations is good, the binding is serviceable and although the photographic illustrations have lost something it cannot be pretended either that they were particularly good in the original or that this decline in quality has in any way affected the real usefulness of the book.

Forrer's work is, of course, by now substantially out of date. Although the second volume of the supplement was published as late as 1930 little information was added after the beginning of the First World War and almost none after about 1920. Obvious consequences of this are that the dictionary is of little use for artists whose careers got under way after about 1910 and no longer the best source of information for the work of medallists on whom monographs have been published in the last fifty years (Hedlinger, Ahlborn, Mayer, Abramson, etc.). A slightly less-obvious consequence is that many of the entries for Italian and German renaissance medallists, published before Hill's and Habich's great works, contain quite misleading attributions.

This is not to imply that the faults of Forrer's dictionary are solely attributable to the passage of time. It is amazingly repetitious, frequently reproducing the same information more than once in a single entry, again under the artists' various signatures (and these are so eccentrically arranged that they may appear in several different places in the text, or not at all) and yet again in the supplements. It is full of inconsistencies—the repeated entries

may give different spellings of the artist's name, different dates of birth or death, and different bibliographies. It contains vast numbers of unconsulted entries, particularly on classical gem and coin engravers, and is very long-winded, quoting the opinions of contemporary critics at amazing length.

Many of these failings arise from the fact that the dictionary is compiled from almost every available source of information, reliable and unreliable alike. They are in a sense the necessary counterparts of its virtues, arising from the haste and confusion inseparable from the titanic effort needed to put together such a work, almost single-handed, in little more than twenty years. The sheer scale of the result, however, ensures that it remains the best immediately available guide to the life and work of most medallists, as the debt owed it by Thieme-Becker and Benezit demonstrates only too clearly, while for many British, nineteenth- and early twentieth-century medallists it is quite simply the best, indeed often the only, source of information in existence.

For these reasons, and since it seems unlikely that any contemporary will have the stamina to emulate Forrer's feat, it can be assumed that his work will continue to be of central importance to those who collect or study medals for a long time to come. It is, then, particularly welcome that this reprint is intended to include, as a ninth volume, Mrs Joan Martin's subject index to the dictionary. This index allows the reader to discover not only who did a medal when the signature is obscure or missing, but also what medals of any particular subject exist, allowing the work to be used as an, admittedly incomplete, corpus of medals. In so doing it does much to reduce the more chaotic aspects of the book to order, and makes it possible, for the first time, to use this great work to the limit of its potential.

MARK JONES

PUBLICATIONS NOTICED, AND ACCESSIONS TO THE LIBRARY, 1980

General

*Book-plates, by ROBERT SEAMAN. *Caesaromagus*, [summer 1980], 4-8: illus. Book-plates of numismatists etc.

*C.I.N. Newsletter = *Lettre d'information*, 1, 1980-. BUREAU DE LA COMMISSION INTERNATIONALE DE NUMISMATIQUE = BUREAU OF THE INTERNATIONAL NUMISMATIC COMMISSION. Basel (c/o Dr H. A. Cahn, Rüttimeyerstrasse 12, CH-4054): the Bureau, 1980-. 25 pp. in no. 1, 1980.

The Department of Coins and Medals, Fitzwilliam Museum, Cambridge. J. G. POLLARD. *Compte Rendu—Commission internationale de Numismatique*, 26, 1979, 41-51.

*... Colloquio sulle forme e i motivi dello scambio e sulle espressioni del valore nel Mediterraneo Orientale, tra la tarda età del Bronzo e gli inizi della monetazione, [Istituto italiano di Numismatica, 1978]: ... relazioni ... [etc.]. *Annali*, 26 (1979), 6-206, pls. i-iv.

**Pieniądz i gospodarka pieniężna w starożytności i średniowieczu*, pod redakcją ANDRZEJA KUNISZA. Katowice: Uniwersytet Śląski, 1979. 163 pp.: illus. (Historia i współczesność, 5.) On coined money and money economy in Antiquity and the Middle Ages; summaries in Russian and French.

**Medium of exchange and money of account in mediaeval accounting documents*, by TITO ANTONI. [1980]. 7 pp. Typescript of paper presented at the 3rd International Congress of Accounting Historians, London, 1980.

**Collecting taxes during the Middle Ages*, by AXEL GRANDELL. Åbo (Handelshögskolan vid Åbo Akademi): Företagsekonomiska Institutionen, 1980. [7] pp.: illus. Typescript of paper presented *ibid.*

*Over het wegen van munten, door G. M. M. HOUBEN. *Jaarboek voor Munt- en Penningkunde*, 62-4, 1975-7, 115-21, pls. 23-6. Coin weights; bankers' weights; Troy (*Trooise*) weights; scales.

*Detailed reports. *Bulletin on Counterfeits*, 4 (2-3), 1979, 62-80: illus. Include Australia: Port Phillip, Kangaroo Office two-ounce piece 1853; England: Briot crown 1632-8; United Kingdom:

five pounds 1887S, half-sovereign 1888, and two pounds 1893.

General: Finds

**Danefæ: til Hendes Majestæt Dronning Margrethe II, 16. april 1980*. NATIONALMUSEET; redaktion ved P. V. GLOB [et al.]; engelsk oversættelse ved Jean Olsen . . . København: Det kgl. nordiske Oldskriftselskab og Jysk Arkæologisk Selskab, 1980. 200 pp.: illus. Text in Danish and English; 'congratulations to Her Majesty Queen Margrethe on the occasion of her fortieth birthday with the present selection of Danefæ treasure trove recovered during the past forty years'; 1752 *Placat* reproduced on endpapers and translated on jacket.

Crown fails to extend treasure trove beyond gold and silver: Attorney General of the Duchy of Lancaster v. G. E. Overton (Farms) Ltd., Chancery Division, June 26, 1980. *The Times*, 27 June 1980, 6. Concerned with the Coleby (Lincs.) find, 1775, of 3-c. antoniniani.

**Starych pieniędzy skarb okrutny . . .*: z historii numizmatyki. TEOFILA OPOZDA. *Biuletyn Numizmatyczny*, 143, 1979, 81-6: illus. 'An awful treasure of ancient coins . . .': on the history of numismatics in Poland, concluding that the finding of hoards allowed the burghers and peasants to enter the gentry.

*Recent chance finds of Celtic, Anglo-Saxon and Norman coins from Lincolnshire and South Humberside. A. J. H. GUNSTONE. *Lincolnshire History and Archaeology*, 15, 1980, 90-1: illus. No. 6 adds Ordwi of Durham in type II of William II.

**Treasure Trove islands: the Scilly Isles*, written by ROLAND MORRIS. Penzance: R. Morris, [1978]. [35] pp.: illus.

General: Methods, Mints, and Minting

*Anwendung der Korundstäbchenmethode auf Probleme der antiken Numismatik. HERBERT BALLCZO, STEFAN KARWIESE und RICHARD MAUTERER. *Numismatische Zeitschrift*, 93, 1979, 41-3.

*Studiul metalografic al unor monede antice și medievale descoperite în Podișul Transilvaniei.

- EUGEN STOICOVICI, MIHAI BLĂJAN. *Marisia*, 9, 1979, 107-18, pls. lxvi-lxxii; Zusammenfassung, 118-21. 'Metallographische Untersuchung antiker und mittelalterlicher, auf der siebenbürger Hochebene gefundener Münzen'.
- *The statistical analysis of coin weights by computer and a rationalized method for producing histograms. STEPHEN N. COPE. *Numismatic Chronicle*, 140, 1980, 178-84.
- *A BASIC program for histograms. DAVID SELLWOOD. *Ibid.*, 201-4.
- *The President's address, [Royal Numismatic Society], ... 1980. D. G. SELLWOOD. *Ibid.*, i-vii, pls. 28-9. Includes 'The relations between art and technology in coinage'.
- A graphical method for calculating the approximate total number of dies from die-link statistics of ancient coins. GILES F. CARTER. In *Scientific studies in numismatics*, edited by W. A. Oddy, 1980 (British Museum. Occasional papers, no. 18), 17-29: tables.
- The technique of some forged medieval silver pennies. W. A. ODDY and MARION M. ARCHIBALD. *Ibid.*, 81-90: illus. Cliché-type forgeries.
- *Thomas Humphrey Paget (1893-1974). G. P. DYER. *Numismatic Chronicle*, 140, 1980, 165-77, pls. 21-4.
- Celtic*
- The Celts. DAPHNE NASH. In *Coins: an illustrated survey* ... , general editor Martin Jessop Price, 1980, 74-85: illus.
- *K otázce 'obolů mrtvých' u středoevropských Keltů. KAREL CASTELIN. *Numismatický Sborník*, 15, 1977-8 (1979), 69-97: illus.; summary in German, 99-101. 'Totenobole bei den Kelten Mitteleuropas'; the chronology of Celtic graves containing coins indicates that the custom spread from the West.
- *Nálezky keltských mincí s kancem a mužikem. ZDENKA NEMEŠKALOVÁ-JIROUDKOVÁ. *Ibid.*, 103-24: map, pl. i; summary in German, 125-7. 'Funde keltischer Münzen mit Eber und Männlein.'
- *The Celtic coins in the Royal Netherlands Cabinet at the Hague, Part I, by D. F. ALLEN. *Jaarboek voor Munt- en Penningkunde*, 62-4, 1975-7, 5-21, pls. 1-17. Part I covers the Danubian coins.
- *Neue Belege zur norischen Keltenprägung. ROBERT GÖBL. *Jahrbuch für Numismatik und Geldgeschichte*, 28-9, 1978-9, 7-10, pl. i.
- *A group of false Celtic gold coins. S[ILVIA] H[URTER]. *Bulletin on Counterfeits*, 4 (2/3), 1979, 49-50: illus.
- *More false Celtic coins. S[ILVIA] H[URTER]. *Ibid.*, 4 (4), 81-2: illus.
- Computer classification of dies: application to the Armorican Trébry hoard. J. LLERES, K. GRUEL, J. LEBLANC, F. WIDEMANN. In *Scientific studies in numismatics*, edited by W. A. Oddy, 1980, 31-9: illus.
- Experimental study of tin distribution in Coriosolite coins. DOMINIQUE BERNARD, ALAIN ROUX, JEAN BARRALIS, KATHERINE GRUEL, FRANÇOIS WIDEMANN. *Ibid.*, 41-52: illus.
- The gold coinage of Verica, by the late D. F. ALLEN and COLIN HASELGROVE. *Britannia*, 10, 1979, 1-17, pls. i-iv.
- Roman*
- *A catalogue of the Roman and related foreign coins in the collection of Sir Stephen Courtault at the University College of Rhodesia and Nyasaland, edited and compiled by THOMAS FRANCIS CARNEY. Salisbury: University College of Rhodesia and Nyasaland, 1963. [3], xxxvii, 69 pp., xiii pls.
- *The western coinages of Nero, by DAVID W. MACDOWALL. New York: American Numismatic Society, 1979. xvii, 155, [9], 156-257 pp., xxv pls. (Numismatic notes and monographs, no. 161.)
- *Winchester studies, 3: Pre-Roman and Roman Winchester, Part II: The Roman cemetery at Lankhills. GILES CLARKE, with contributions by J. L. MACDONALD and others; editorial contributions by MARTIN BIDDLE; illustrations by the Winchester Research Unit. Oxford: Clarendon Press, 1979 [i.e. 1980]. xli, 468 pp.: illus., [70] (some fold.), xvii pls. Includes 'Coins' by Richard Reece, pp. 202-5, and discussion of coins in graves.
- A survey of Romano-British coin hoards in Leicestershire. M. J. WINTER. *Leicestershire Archaeological and Historical Society Transactions*, 53, 1977-8, 1-7.
- *The 1973 Beachy Head treasure trove of third-century antoniniani. R. F. BLAND; appendix: the Beachy Head bucket, [by] CATHERINE JOHNS. *Numismatic Chronicle*, 139, 1979, 61-107, pls. 12-14.
- *The Hambleton (Bucks.) hoard of folles. C. E. KING. *Ibid.*, 140, 1980, 48-63, pls. 6-7.

The Piercebridge (Co. Durham) hoard of the mid-third century 'antonin[i]ani', and a note on Elmer 593 (Postumus), by P. J. CASEY and R. COULT. *Coin Hoards*, iii, 1977, 72-6.

Bourne End find (1976), by ANDREW BURNETT. *Ibid.*, 77-8.

Enfield, London Road, by J. P. C. KENT. *Ibid.*, 78-9.

Three early Imperial hoards from Lancashire, by D. C. A. SHOTTER. *Ibid.*, iv, 1978, 44-5.

The Langford find (1977), by A. BURNETT. *Ibid.*, 45.

Barway, Cambridgeshire, 1977, by R. A. G. CARSON. *Ibid.*, 46.

Unpublished Roman hoards in the Wisbech and Fenland Museum, by D. C. A. SHOTTER. *Ibid.*, 47-50.

A further component of the Beaumont hoard, 1855, by P. J. CASEY. *Ibid.*, 50-5.

Coins from the Little Orme hoard, 1873, in the collection Willoughby Gardner . . ., by GLENYS LLOYD-MORGAN. *Ibid.*, 56-9.

Moel Fenlli hoard, Llanferres, July 1816 . . ., by GLENYS LLOYD-MORGAN. *Ibid.*, 59-61.

*A bracelet of late-Roman siliquae, by J. C. BRINDLEY. *Occasional Papers—Numismatic Society of Ireland*, 17 and 18, 1977, [16-20], pl. 4.

Continental Europe: Western and Central

Western Christendom 700-1450. PHILIP GRIERSON. In *Coins: an illustrated survey* . . ., general editor Martin Jessop Price, 1980, 142-77: illus.

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*De 7e-eeuwse muntvondst Nietap, door ARENT POL. *Jaarboek voor Munt- en Penningkunde*, 62-4, 1975-7, 23-61, pls. 18-19; summary in English, 62.

*BLAGOTA CONIUNX und EMMA REGINA: einige Randbemerkungen zu den ältesten böhmischen Herzogsmünzen. WOLFGANG HAHN. *Jahrbuch für Numismatik und Geldgeschichte*, 28-9, 1978-9, 65-80, pl. 16.

*Portrety na monetach i banknotach polskich. JÓZEF ANDRZEJ SZWAGRZYK. Wrocław [etc.]: Zakład Narodowy imienia Ossolińskich, Wydawnictwo, 1980. 15, [142] pp.: 136 pls.

*César et Sancerre. MICHEL DHÉNIN. *Bulletin—*

Le Club français de la Médaille, 62-3, 1979, 150-8: illus.

L'esterlin au type irlandais de Walerain II, seigneur de Serain (1304-1353 et 1364-1366). JEAN DUPLESSY. *La Vie numismatique (Alliance européenne numismatique)*, 30 (1), 1980, 51-9: illus.

*Les espèces, les ateliers, les frappes et les émissions monétaires en Guyenne anglo-gasconne aux XIV^e et XV^e siècles. P. CAPRA. *Numismatic Chronicle*, 139, 1979, 139-54; 140, 1980, 132-64.

*Muntvondsten. H. ENNO VAN GELDER, H. W. JACOBI [et al.]. *Jaarboek voor Munt- en Penningkunde*, 62-4, 1975-7, 165-83: illus. The Twisk (N.H.) find 1975 included a Henry VIII crown of the double rose (North 1791); the Goudriaan (Z.H.) find 1976, two Elizabeth sixpences; the Abbebroek find 1976, two William III shillings and a sixpence.

**Coins and medals: . . . centenary auction sale, 17-21 November 1980 . . .* JACQUES SCHULMAN B.V. Amsterdam: Schulman, [1980]. [11], 226 pp., 105 pls. Includes the 1979 hoard from Huizinge (Groningen, gemeente Middelstum), contents 15-16 c., inter alia a London ryal and two continental imitations countermarked at Groningen 1590.

**La circulación monetaria en Polonia desde el siglo XVII hasta principios del siglo XIX*. [ANDRZEJ MIKOLAJCZYK]. [Havana?]: Museo Arqueológico y Etnográfico de Lodz, Museo Numismático del Banco Nacional de Cuba, 1980. [1], 41 pp.: illus.

Continental Europe: Northern

*Upieniężnienie wymiany w zachodniej części strefy bałtyckiej w 2 połowie V-VI w.n.e. JERZY GAUL. *Wiadomości Numizmatyczne*, 23 (88), 1979, 69-85; summary in English, 85-6. 'Monetization of exchange in the western part of the Baltic Zone in the second half of the 5th and in the 6th century.'

**Corpus nummorum saeculorum IX-XI qui in Suecia reperti sunt = Catalogue of coins from the 9th-11th centuries found in Sweden . . .*, 16: *Dalarna, 1: Falun—Rättvik*, edidit BRITA MALMER; cooperantibus . . . aliis. Stockholm: Almqvist & Wiksell International [for the] Kungl. Vitterhets Historie och Antikvitets Akademien, 1979. xxxiv, 107 pp.: 7 pls. Includes the 1977 hoard from Sanda, pp. 37-76, pls. 4-7.

Coins and currency, by MARION M. ARCHIBALD. In *Viking artefacts: a select catalogue*, [by] James Graham-Campbell, 1980, 103-22, 277-8: illus.

- *Coin imitations as jewelry in eleventh-century Finland. TUUKKA TALVIO. *Finski Museum*, 1978, 26-38: illus.
- *Entisen Suomen Karjalan esihistorialliset rahalöydöt. TUUKKA TALVIO. *Suomen Museo*, 1979 (1980), 5-20: illus.; summary in English, 20. 'The coin finds of the former Finnish Carelia', viz. c.650 10-11-c. coins.
- *Notes on three Sigtuna moneyers. TUUKKA TALVIO. *Numismatic Chronicle*, 139, 1979, 221-5, pl. 33A.
- The coins from the Löddeköpinge cemetery, by GEORG GALSTER and JØRGEN STEEN JENSEN. *Meddelanden från Lunds universitets historiska museum*, n.s. 3, 1979-80, 124-7: illus. Thirteen grave-finds of c.1050-1100, interpreted as Charon's Fee.
- Continental Europe: Eastern*
- *1978. aasta arheoloogiliste välitööde tulemusi, koostanud J. SELIRAND. In *Toimetised—Eesti N.S.V. Teaduste Akadeemia: Ühiskonnateadused*, 28 (4), 1979, 361-98: illus., 2 diagrs. (fold.), pls. i-xiv. 'Resultate der archäologischen Feldarbeiten von 1978'; a 10-11-c. hoard including 73 Anglo-Saxon was excavated at Olustvere (A. Molvögin and V. Sokolovsky, pp. 392-5, pl. xiv), and a second hoard at Olustvere, 13-14 c. including 87 English and Irish (V. Sokolovsky, pp. 395-8).
- *Nekotoriue rezul'tatui issledovaniya poseleniya v Olustvere. A. LAVI, V. SOKOLOVSKY. *Ibid.*, 29 (4), 1980, 387-90: illus., pls. xix-xxi; summaries in Estonian and German, 390-1. Cyrillic title transliterated; 'Über einige archäologische Untersuchungsergebnisse der Siedlung Olustvere'; additional coins from Olustvere I included 15 Anglo-Saxon and -Norman.
- A hoard of English sterlings from the Aegean, by Ian Stewart. *Coin Hoards*, v, 1979, 141-2. Naxos find c.1968.
- *Gold coins and coin-like gold in the Muscovite state, and the first gold pieces of Ivan III. I. G. SPASSKI; [translated from the Russian by H. Bartlett Wells]. *Numismatic Chronicle*, 139, 1979, 165-84, pl. 26. Includes a *korabel'nik*, imitating the English noble.
- Anglo-Saxon*
- *Saxon Croydon, by J. CORBET ANDERSON. [Croydon?: the author?], 1877. [3], 79-157, 7 pp.: illus., ix-xii pls. Includes the Croydon, Whitehorse, find of 1862, pp. 115-55.
- Osgod/Osgot on early Anglo-Danish coins: the provenance of some names in -god reassessed in the light of numismatic evidence. T. KISBYE. In *Essays presented to Knud Schibbye*, edited by M. Chesnutt... [et al.], Copenhagen 1979.
- *The Hougham hoard of sceattas, c.1780. C. E. BLUNT. *Numismatic Chronicle*, 139, 1979, 108-10, pl. 15.
- *The Oakham hoard of 1749, deposited c.980. C. E. BLUNT and C. S. S. LYON. *Ibid.*, 111-21, pl. 16A.
- *An unrecorded parcel from the Hexham hoard of 1832. K. F. SUGDEN and M. WARHURST. *Ibid.*, 212-17, pls. 31-2.
- *A parcel of coins from Cuedale in the Reichel collection. TUUKKA TALVIO. *Ibid.*, 140, 1980, 188-91, pl. 25A.
- *Wærin: a Northampton moneyer for Eadgar. MARK BLACKBURN. *Ibid.*, 139, 1979, 217-19, pl. 16B.
- *A Caistor coin of Æthelred's Hand type. IAN STEWART. *Ibid.*, 219-21, pl. 16c.
- England (1066-1707)*
- *Presidential address, [Essex Numismatic Society], 1979, by ROBERT SEAMAN. In *Caesarmagus*, [summer 1980], 13-16. On Henry I, type XI.
- *The burial date of the Eccles hoard. IAN STEWART. *Numismatic Chronicle*, 140, 1980, 194-7.
- *Lincolnshire hoard, 1800, by N. J. MAYHEW. *Coin Hoards*, iv, 1978, 125-6. 13-14 c.
- *Crathes hoard, 1863, by N. J. MAYHEW. *Ibid.*, 127. 13-14 c.
- A 15th-century English gold hoard from an unknown site, by MARION M. ARCHIBALD. *Ibid.*, iii, 1977, 124-7: illus.
- Re-dating the Holwell, Leics., hoard in the light of a parcel of coins in the British Museum, by MARION M. ARCHIBALD. *Ibid.*, v, 1979, 110-12: illus.
- *Richard's lucky day. IVAN R. BUCK. In *Caesarmagus*, [spring 1980], 14. A Braintree find of a quarter-noble (North 1224).
- *Tin testoon of Henry VIII. JOSEPH BISPHAM. *Ibid.*, 11. A forgery made at the Bristol mint under Sharrington.
- *The silver trial plate of 1526. C. E. CHALLIS. *Numismatic Chronicle*, 140, 1980, 197-201, pls. 26-7.
- *[Patent, 1613 April 10, granting to John Lord Harington the sole privilege, for three years, of

making farthing tokens of copper.] *The Pattent for Farthing Tokens*, [10th Aprill, 11 James I]; [and, Indenture, 1613 April 12, by which John Lord Harington agrees to deliver a quarterly account, and to pay to the King all profits above £20,000]. *The Covenante betwene the Lo[r]d Harington and the Kinge for his Accompt to the Kinge for the Pattent of Farthing Tokens*, 12th Aprill, 11 James I. [10, 3] pp. Mounted photograph of MS.

*Counterfeits of coins of Charles I struck during the Civil War period, III: Oxford pound 1642 and Oxford half-pounds 1642 and 1643; IV: Newark halfcrown 1646. E. G. V. N[EWMAN]. *Bulletin on Counterfeits*, 4 (2/3), 1979, 60-1: illus.; 4 (4), 1979, 92-3: illus.

**The Collection of English milled silver coins (1656-1800), the property of H. E. Manville of Washington D.C.* . . . [etc.]: catalogue . . .; date of sale . . . 4 June 1980 . . . SPINK COIN AUCTIONS. London: Spink, [1980]. vii, 68 pp.: illus. Lot 5 documents the four genuine Cromwell sixpences; lot 136 (1697 York halfcrown) notices a faint central cross marked in dies to help position the compass point.

*An eighteenth-century hoard from Philadelphia, by PETER P. GASPAR and ERIC P. NEWMAN. *Coin Hoards*, iv, 1978, 127-30: illus.

Great Britain (1707-)

**Annual report* [of the] NATIONAL ART-COLLECTIONS FUND, 76th, 1979. London: N.A.C.F., 1980. [1], 82 pp.: illus. Includes (p. 49) a 1718 guinea from the 1977 Winsford hoard, bought by the Grosvenor Museum, Chester.

*American circulation of English and Bungtown halfpence. ERIC P. NEWMAN. In *Studies on money in early America*, Eric P. Newman editor . . ., 1976, 134-72: illus. 'Bungtown' is identified and the term explained; the evasive halfpence, to which the term has often been applied, are shown never to have circulated in America.

Kingston-on-Thames, Surrey, hoard, by J. P. C. KENT. *Coin Hoards*, iii, 1977, 127.

**The gold sovereign*. MICHAEL A. MARSH. Cambridge (18B Chesterton Road, Cambridge, CB4 3AX): Michael A. Marsh, Cambridge Coins, 1980. iii-x, 72 pp.: illus.

*Detailed reports. *Bulletin on Counterfeits*, 4 (4), 1979, 112-21: illus. Include an 1817 sovereign.

*Counterfeit sovereigns in platinum, by G. P. DYER. *Ibid.*, 4 (2/3), 1979, 30-5: illus. Dated 1861-72 and fabricated in Spain c.1869-77.

*United Kingdom: Victoria half-crowns 1861 (1866, 1868), 1871, silver. *Ibid.*, 36-8: illus.

*Counterfeit sovereign 1918M 'R21'. *Ibid.*, 4 (4), 1979, 102: illus.

Scotland, Isle of Man

*The Scottish gold coinage of 1555-8. J. K. R. MURRAY. *Numismatic Chronicle*, 139, 1979, 155-64, pls. 24-5.

**Catalogue of the Hilary F. Guard collection of Manx coinage* . . . which will be sold by auction by ELDON E. WORRALL & COMPANY . . . Liverpool . . . 23rd October 1980 . . . [Liverpool: Worrall, 1980]. 29 pp., [6] pls. £5.

*Die-links of an eleventh-century Dublin penny in the Isle of Man, by W. A. SEABY. *Irish Numismatics*, 13 (74), 1980, 61-4: illus.

*Additional light on the 1834 coin-hoard from Kirk Michael (Isle of Man), by MICHAEL DOLLEY. *Ibid.*, 82-4: illus.

Ireland

The Hiberno-Norse element in the 1924 Igelösa hoard from Skåne, by MICHAEL DOLLEY. *Coin Hoards*, iv, 1978, 157-9: illus.

*The Hiberno-Norse coins in the University Coin-Cabinet at Uppsala. M. DOLLEY. *Numismatic Chronicle*, 139, 1979, 225-9, pl. 33b.

*Five further Anglo-Irish pieces with a Porvoo (Borgå) provenance, by MICHAEL DOLLEY. *Irish Numismatics*, 13 (73), 1980, 9-11: illus.

*Enige geklopte munten van Eire, door O. D. CRES[s]WELL; vrij vertaald en . . . bijgewerkt . . .; voorwoord door PETER KRANEVELD. *De Beeldenaar*, 4 (4), 1980, 160-5: illus. Pp. 161-5 originally published as 'Some countermarked Eire coins', 1977.

The Irish and British pounds: old and new relationships, by N. J. GIBSON. *Three Banks Review*, 125, 1980, 49-63.

English-speaking World

**Studies on money in early America*, Eric P. Newman editor, Richard G. Doty associate editor. New York: American Numismatic Society, 1976. v, 216 pp.: illus.

*Linked rings: early American unity illustrated, by DAVID P. MCBRIDE. *The Numismatist*, 92 (11), 1979, 2373-93: illus. The use of the

- motif of linked rings on paper money, coins, medals, etc.
- *Zur Grenzziehung des Moghulreiches im 19. Jahrhundert an Hand regionaler Münzprägungen. BJÖRN-UWE ABELS. *Jahrbuch für Numismatik und Geldgeschichte*, 28-9, 1978-9, 143-8, pl. 22. On the demarcation of the Mogul Empire in the 19th century by means of native states coinages.
- *Counterfeit Bombay 15 rupees 1770. *Bulletin on Counterfeits*, 4 (2/3), 1979, 39: illus.
- *Counterfeit Ceylon 96 stuivers 1803. *Ibid.*, 45-6: illus.
- Jettons, Tokens, etc.*
- *Missbrauch von Rechenpfennigen. HELMUT HIRSCHBERG. *Mitteilungen der Österreichischen Numismatischen Gesellschaft*, 21 (12), 1980, 176-7. A 1533 case in the Tyrol of jettons being passed for gulden.
- A hoard of lead tokens from Evesham, by MARION M. ARCHIBALD. *Coin Hoards*, v, 1979, 113-15: illus.
- *Seventeenth-century Lincolnshire tradesmen and their tokens, [written by ANDREW WHITE]. [Lincoln]: Lincolnshire Museums, 1980. 6 pp.: illus. (Information sheet, numismatic series, no. 3.)
- *Here we go round to Mabblerley's 'Bush?': notes on a Farnham seventeenth-century token issuer. R. A. MERSON. *Newsletter—Farnham and District Museum Society*, 5 (11), 1980, 229-37.
- Businessmen who issued tokens in Ireland, 1653-79. B. DE BREFFNY. *Irish Ancestor*, 10 (1), 1978.
- *'St. Patrick for Ierland' token, by ROBERT SHARMAN; photograph by P. Frank Purvey. *Irish Numismatics*, 13 (75), 1980, 109: illus.
- *Beschreibung der bekanntesten Kupfermünzen, Volume IV: [enthält die Beschreibung englischer Token, Jettone und Zeichen]. JOSEF NEUMANN. 1st edn., facsimile reprint . . . New York; London: Johnson Reprint Corporation, 1966. [14], 451 pp., [3] pls. Vol. IV originally published Prag [= Prague]: Eigenthum und Verlag des Verfassers, 1865; covers tokens of the British Isles from c.1680 to the eighteen-sixties.
- Tokens as documents of the Industrial Revolution, by JIM NEWMARK. *History Workshop*, 9, 1980, 129-42: illus.
- *Counterfeit Franklin Press token. *Bulletin on Counterfeits*, 4 (4), 1979, 103: illus.
- Nineteenth-century Worcestershire tokens in Birmingham City Museum. S. DAVIES. *Worcestershire Archaeology and Local History Newsletter*, 23, 1979.
- Chemical analysis of the silver token coinage, 1811-1812. G. R. GILMORE. In *Scientific studies in numismatics*, edited by W. A. Oddy, 1980, 91-7: diags., tables.
- Chemical analysis of some nineteenth-century silver tokens from the north of England. G. R. GILMORE and G. BERRY. In *Metalurgy in numismatics*, 1, edited by D. M. Metcalf and W. A. Oddy, 1980, 186-93, pl. 28.
- An 1822 Proclamation regarding tokens by the Lord Mayor of Dublin. A. E. J. WENT. *Dublin Historical Record*, 32 (3), 1979.
- *Lincolnshire nineteenth-century and later tickets, checks and passes: a provisional listing, [prepared by ANTONY GUNSTONE]. [Lincoln]: Lincolnshire Museums, 1980. 11 pp.: illus. (Information sheet, numismatic series, no. 2.)
- *Nineteenth-century Lincolnshire beer tickets, [prepared by ANTONY GUNSTONE]. [Lincoln]: Lincolnshire Museums, 1979. 8 pp.: illus. (Information sheet, numismatic series, no. 1.)
- *An 'imaginery' [sic] 19th-century Irish farthing token, by E. K. COLEMAN and N. B. TODD. *Irish Numismatics*, 13 (74), 1980, 89: illus. Drury 52.
- *An 'emergency' token, by F. E. DIXON. *Ibid.*, 13 (76), 1980, 163: illus. Of Lady's Island (Co. Wexford), for peat-cutting.
- Medals, Badges*
- *H. Willibrordus, door H. TUSSEN. *De Beeldenaar*, 3 (9), 1979, 263-5: illus. On a 1939 medal of St. Willibrord by Jac. J. van Goor (1874-1956).
- The changing face of Henry VIII, by MICHAEL VICKERS. *Country Life*, 167 (4320), 24 April 1980, 1248-9: illus. A result of studying a bust of Henry VIII is the re-dating of a medal of the Earl of Leicester, M.I. *Elizabeth* 103, to 1565-6.
- Science on its metal, by ANTHONY R. MICHAELIS. *Antique Machines + Curiosities*, 1 (5), Jan. 1980, 26-8, 43: illus. Medals of scientists.
- *Catalogue of European historical medals of Denmark, Sweden, Poland, Russia, France, and the Low Countries, from the collection of His Grace the Duke of Northumberland . . . removed from Alnwick Castle, Northumberland, which will be sold by auction . . . 3rd December, 1980 . . . SOTHEBY PARKE BERNET & CO. [London: Sotheby's, 1980]. [2], x, [69] pp.: illus., lxii pls.

- **A catalogue of British historical medals, 1760–1960, Vol. I: The accession of George III to the death of William IV.* LAURENCE BROWN. [London]: Seaby Publications Ltd., 1980. xxvi, 469 pp.: illus.
- *Isaac, John Craig and William Theodore Parkes, Irish medallists, by HILDA M. PARKES. *Occasional Papers—Numismatic Society of Ireland*, 17 and 18, 1977, [2–15], pls. 1–3.
- *The enigma of a Daniel O'Connell medallion, by A. E. J. WENT. *Irish Numismatics*, 13 (73), 1980, 23; 13 (74), 1980, 88: illus. Rev. Prince Albert, by W. Griffin.
- *Note sur l'histoire de l'écoissisme en France. MAURICE COHEN. *Bulletin—Le Club français de la Médaille*, 62–3, 1979, 121–2: illus. A masonic jetton uniting two Scottish lodges in Paris.
- *Murray River medal sold. *Australian Numismatic Journal*, 31 (1), 1980, 5–6: illus. By Leonard Wyon, 1853.
- *Numismatic metamorphoses: essays on some derived medallic mementoes. D. J. RAMPLING. *Ibid.*, 30 (1), 1979, 4–11: illus. A medal 'cast from metal of the Burnham Church bell, 1440' refers to Burnham on Crouch (Essex), and was one of six made in 1911 at Booth & Brooks Ironworks, Burnham.
- *Conan Doyle. In *Bulletin—Le Club français de la Médaille*, 64, 1979, 90–1, 155: illus. A medal of Conan Doyle by Louis Leygue.
- *Sur une médaille: les deux Francis Bacon. [ROBERT] COUTURIER. *Ibid.*, 62–3, 1979, 92: illus.
- *The Palles Mathematical Medal, by F. E. DIXON. *Irish Numismatics*, 13 (77), 1980, 205, 211: illus. Established 1905 for Clongowes Wood College.
- *1907 Dublin Exhibition, by F. E. DIXON. *Ibid.*, 13 (78), 1980, 253, 267: illus.
- *Designing a papal plaque, by THOMAS RYAN. *Ibid.*, 13 (74), 1980, 92–3: illus.
- Ronald Searle: the humorist as medallist. PIERRE DEHAYE; translated [from the French] by Gabriele Annan. In *Ronald Searle*; with an introduction by Henning Bock . . ., 1978, 210–14: illus. Medals, designs, and clay maquettes for medals are illustrated on pp. 207–26, 230.
- Paper money*
- Paper money. VIRGINIA ANDERSON. In *Coins: an illustrated survey* . . ., general editor Martin Jessop Price, 1980, 242–9: illus.
- Keeping notes: . . . the newly established National Collection of Banknotes. VIRGINIA ANDERSON. *The British Museum Society Bulletin*, 35, 1980, 25–8: illus.
- **The works asterisked have been added to the library by donation, exchange, or purchase. The other publications noticed are restricted to contributions to periodicals and composite works, and exclude (in addition to this Journal) Coins and Medals, The Numismatic Circular, and Seaby Coin and Medal Bulletin. Separately published books which have not been received by the Society are not included.*

R. H. THOMPSON

PROCEEDINGS OF THE BRITISH NUMISMATIC SOCIETY, 1980

All meetings were held at the Warburg Institute, the President, Mr Woodhead being in the chair, except at the meeting in April.

On 22 January the President announced the deaths of Mr H. A. Seaby, Honorary Member, Sir Francis Hill, and Archdeacon C. Ellison, and members stood to their memory. Mr M. Dolley read a paper entitled 'Imitation of Imitation, and Imitation of Imitation of Imitation: Some Problems Posed by the Non English "Helmet" Pennies with the Name of Æthelred II'.

On 26 February Mr Reinard Flören, Mr Michael Alec Marsh, Mr M. F. McLeod, and Mr J. D. Scaife were elected to Ordinary Membership. Mr John Brand read a paper entitled 'Scruples'.

On 25 March Dr R. G. Bromley, Mr H. Mountain, and Bedford Museum were elected to Ordinary Membership. Mr P. J. Seaby read a paper entitled 'The Pattern of Coinage in Stephen's Earldoms'.

On 22 April Mr John Brand, Director, being in the chair, Mr J. P. Linzalone was elected to Ordinary Membership. The evening was devoted to short papers—post 1500. Mr G. C. Boon read a paper entitled 'A Civil War Hoard and Civil War Mints'; Mr G. P. Dyer read a paper entitled 'The Elusive Counter-Puncheon'; Mr Peter Morley read a paper entitled 'The Slough Medalets of William Till'; and Mr M. J. Sharp read a paper entitled 'Observations on the Early Coins of Charles I'.

On 27 May Professor P. Grierson was elected to Honorary Membership. Mrs S. M. Greenall, Mr Y. Otani, and the American Numismatic Association were elected to Ordinary Membership. Mr E. R. D. Elias read a paper entitled 'Some Observations on the Coinages of Aquitaine'.

On 24 June the evening was devoted to short papers—pre 1500. Mr G. C. Boon read a preliminary note on the June 1980 find in Cardiff of a hoard of pennies of the Empress Matilda; Mr M. A. S. Blackburn read a paper on finds from the Lincoln excavations; Mr R. A. Merson read a paper entitled 'A New Coinage of Edward III?'; Mr G. P. Gittoes read a paper entitled 'When is a Mint-Signature not a Mint-Signature?'; and Miss M. M. Archibald read a paper on the 1980 hoard of forged Edward IV pence from Queenhithe.

On 23 September the President announced the deaths of Mr S. E. Rigold, Vice-President, Past President, and Medallist, and of Major F. Prid-

more, Honorary Member. The members present stood to their memory. Mr G. C. Boon, Mr J. D. Brown, and Mr H. S. Caballero were elected to Ordinary Membership. Dr D. M. Metcalf read a paper entitled 'Trends in English Monetary Policy, c.973–1087'.

On 28 October Council's proposals for Officers and Council for 1980–1 were read out, together with their proposals for subscription rates for 1981. Mr D. B. Bailey, Mr H. Hartkopf, Mr R. Heslip, Mr B. R. Lorich, Mr S. C. Minnitt, Mr A. O'Keefe, Mr G. Peakall, and Mr H. E. Spencer were elected to Ordinary Membership. Mr T. D. Cook was elected to Junior Membership. Mr G. P. Dyer read a paper entitled 'The Una and the Lion Five Pound Piece'.

At the Anniversary Meeting on 25 November, Mr Per-Göran Carlsson, Mr P. J. Casey, Mrs R. A. C. B. Crowley, Mr I. M. Kaplan, Mr S. M. Kaplan, and Mr R. P. Varnham were elected to Ordinary Membership. The following Officers and Council were elected for 1981.

President: J. D. Brand.

Vice-Presidents: C. E. Blunt, OBE, FBA, FSA; C. V. Doubleday; C. S. S. Lyon, MA, FSA, FIA; H. Schneider; B. H. I. H. Stewart, RD, MA, D.Litt, FSA, FSA Scot., MP; P. Woodhead, FSA.

Director: G. P. Dyer, B.Sc.

Treasurer: R. J. Seaman, FIB.

Secretary: W. Slayter.

Librarian: R. H. Thompson, ALA.

Editor: C. E. Challis, BA, Ph.D., F.R.Hist.S.

Council: Miss M. M. Archibald, MA, FSA; G. Berry, BA; M. A. S. Blackburn, MA; G. P. Gittoes, B.Sc.; A. J. H. Gunstone, BA, FSA; R. N. P. Hawkins; R. A. Merson; P. D. Mitchell; Mrs J. E. L. Murray, MBE, MA; H. Pagan, MA; Miss E. J. E. Pirie, MA, FSA Scot.; J. Porteous, MA; J. G. Scott, B.Sc., MCIT; P. J. Seaby.

Council's proposals that the subscriptions for 1981 should be £18 for Ordinary Members and £7.50 for Junior Members were adopted.

The John Sanford Saltus Medal for 1981 was awarded to Miss M. M. Archibald.

The President, Mr P. Woodhead, delivered his Presidential Address.

PRESIDENTIAL ADDRESS

As in previous years the first part of my address takes the form of a review of our progress in the past twelve months.

Membership

I am pleased to inform you that 1980 has shown a net increase in the number of members. The total as at this evening is 542 which is eleven more than the comparable figure for last year. The new total, which as before is subject to reduction by the amovals, is made up of seven junior members, six honorary members, and 529 ordinary members. Of the latter, 128 are institutional members.

New members elected in 1980 totalled thirty-two (twelve more than in 1979): comprising thirty-one ordinary members and one junior. One existing member, Professor Philip Grierson, has been elected to honorary membership.

The increase in membership in 1980 has more than wiped out the small losses of the preceding two years, and we particularly owe our thanks to those members who have made the effort to introduce new members.

Death, alas, has taken from us some members of particular seniority and distinction. During the year we have lost a Vice-President, two honorary members, and two ordinary members, and it is appropriate that I should say a few words about each of them.

Mr H. A. Seaby, 'Bert' Seaby, who died on 2 December 1979, was the Society's oldest member, having joined as long ago as 1926, the same year in which he founded the firm that bears his name. He was made an honorary member of the Society in 1973. Although, in his later years, not a very frequent attender at our meetings, we saw him here from time to time and many members will remember the sherry party that he so generously gave us in 1976 to mark fifty years of membership. Mr Seaby's contributions to the world of numismatics were, of course, very numerous and have been chronicled elsewhere, particularly and appropriately in Seaby's *Coin and Medal Bulletin* of February 1980. Although, so far as I can determine, Mr Seaby never contributed to *BNJ*, there can be no single member of our Society who has not consulted one of the many catalogues written by him over the years and published by B. A. Seaby Ltd. These catalogues, always much more than just lists, were eminently practical and useful works and were very much Mr Seaby's own conception; the first, *The Milled Silver Coinage of England*, having been written when he worked for Spink & Son Ltd., prior to starting his own firm. Mr Seaby attended his office to within a few days of his death, and to those of us who have visited Seaby's over a period of many years it seems as if one of the permanent institutions of British numismatics has gone. We all miss him and we offer our sympathies to his family and colleagues.

Another long-standing member of whose death we learned in the year was Mr Norman Griffiths. Mr Griffiths joined the Society in 1943 and was the last member we had who had compounded for his subscription for life. While never a very active member so far as this Society was concerned, we are deeply sorry to learn of his death.

Major Fred Pridmore, who died on 6 August, had been a member of our Society since 1944 and was made an honorary member in 1976. Although in later years it was a matter for regret that he was rarely able to be at our meetings—he lived in Taunton—he was a regular attender in the late 1940s and 1950s and a frequent speaker. Major Pridmore's special interest was, of course, the coinage of the Commonwealth and of former Commonwealth territories, and the culmination of his studies was the series of volumes *Coins of the British Commonwealth of Nations to the end of the Reign of George VI, 1952*, published by Spink & Son Ltd. In his obituary for Major Pridmore in the *Num. Circ.* of September last, Mr Howard Linecar says: 'No obituary however written can add to Fred's stature as a numismatist. Painsstaking to the point of personal exhaustion in his research, accurate in his writings and cautious in the face of anything that defied solution, his work will stand as his memorial for generations to come.' I do not think that any of our members would disagree with that and what better epitaph could a numismatist have?

Yet another sad loss to the world of numismatics is Sir Francis Hill, who died on 6 January. Sir Francis joined this Society in November 1949 and was a member of Council during the 1950s. He

lived in Lincoln and, thus, in recent years was only rarely able to attend our meetings. Sir Francis Hill, a solicitor and at one time Lord Mayor of Lincoln, had a deep and enthusiastic interest in the history of his city and his county, and was the author of several works on these subjects. He had collected coins all his life and, not surprisingly, developed a specialized interest in coins of the Lincolnshire mints of Lincoln and Stamford. He started to build up his collection of these in the early 1930s, and was able to buy at important sales over a long period of time. In 1979 Sir Francis most generously donated to the City of Lincoln his collection of 1,000 Lincoln and 400 Stamford coins together with about 100 coins from the Terney and South Kyme hoards. He has bequeathed to the Lincolnshire County Council a small hammered gold collection as well as collections of English milled coins, Newark siege pieces, and seventeenth-century tokens, together with his numismatic library. Although, so far as I know, Sir Francis himself never published the results of any numismatic studies in our *Journal*, he was in the fortunate position of being able to devote considerable resources to building up his collections and, as his circle of friends included some of the leading numismatists and historians of the day, these reflect the fruits of their friendly encouragement as well as of Sir Francis's excellent judgement. The collections themselves, now preserved in Lincoln for future generations of students to consult, are Sir Francis's own creative and enduring contribution to numismatic history.

Finally, in this sad catalogue of mortality, I know we were all particularly saddened to learn of the death, on 5 July, of our Vice-President and my predecessor as President, Mr Stuart Rigold. Members may have seen the obituary, probably of antiquarian but clearly not of numismatic authorship, that was published in *The Times* on 15 July and reprinted in the September edition of *Num. Circ.* An admirable supplement to this was printed in the November *Num. Circ.*, which was certainly of numismatic authorship and which, in particular, brought out the scholarly and generous qualities which were Stuart's special gift to his numismatic friends. There is not much I can add to these. Stuart became a member in February 1949 but it was, in fact, some months earlier, in June 1948, that he had read to the Society his paper on the subject of continental copies of English sterling coins entitled 'The Trail of the Easterlings' which was published in *BNJ* 1949. 'The Trail of the Easterlings' was a masterly, characteristic, and, as time has shown, enduring example of Stuart's wonderful quality of being able to relate and interpret evidence from a number of scholarly disciplines, and demonstrated his ability to perceive and to communicate the conclusions—and properly prudent speculations—that could arise from this. Those qualities were demonstrated in other publications, notably that on the primary series of sceattas, a fine example of creative analysis, and we very much regret that his death occurred before he had completed his work on medieval jettons.

It was Stuart's contributions to the *Journal* which brought him the John Sanford Saltus medal in 1977. However, what regular attenders at our meetings will remember is something of which there can unhappily be no real record in black and white and for which we have no medal to award. I refer, of course, to the enormous contribution he made, both at our meetings in the informal discussions after the delivery of a paper, and later, round the dinner table, when invariably, and in the kindest manner conceivable, he would pull out of the hat, as it were, some relevant and illuminating fact—or even a whole string of them—which would immediately open new doors for thought and discussion. Stuart with his wide interdisciplinary knowledge was very good for us. As individuals and as a Society we are immeasurably poorer for his loss. Stuart Rigold became President in 1970 and held that office until 1975. In 1976 he was made a Vice-President. He was a frequent attender at our meetings—the last occasion being in May when he and Mrs Rigold were here and stayed on afterwards for the Council Sherry Party. I saw him once after that, at the Royal Numismatic Society Sherry Party in June. I have conveyed the Society's sympathies to Mrs Rigold.

The Year's Programme

Once again, we must thank our Director, Mr John Brand, for organizing a successful and interesting programme for us in the past year.

It was a particular pleasure for us to see Professor Dolley again during his visit in January and to hear from him a paper with what I can only describe as the inimitable and characteristic title of 'Imitation of Imitation and Imitation of Imitation: some problems posed by the non-English "Helmet" pennies with the name of Aethelred II'. Michael Dolley's exploration of the stages through which imitations of the 'helmet' type passed showed that his great skill at producing numismatic rabbits out of British, Irish, and Scandinavian hats remains undimmed in spite of the physical

remoteness of his present appointment in Australia. We look forward to hearing from him again before long.

We enjoyed a second Anglo-Saxon evening in September when Dr Metcalf talked to us on the subject of 'Trends in English Monetary History, c.973-1087'. As one might have expected, Dr Metcalf was concerned with the economic context and he explored aspects of the purpose and use of coinage in late-Anglo-Saxon England and, in particular, considered the effects of Danegeld payments on coinage, silver stocks, and minting activities.

A slightly later period was covered in March when Mr Peter Seaby spoke to us on 'The Pattern of Coinage in Stephen's Earldoms'. We have come to know that we may expect from Mr Seaby an original and creative approach to the numismatic implications of the complex political and military situations that existed in Stephen's reign, and which are certainly reflected in the irregular or semi-regular coinages of that period, and we were in no way disappointed.

Still in the Middle Ages, but rather later, we were particularly pleased to hear a paper at our May meeting from our member from Holland, Jonkheer Meester E. R. D. Elias on an 'Anglo Gallic' subject. There is still much to be learned about these coinages which, while closer to the French than to the English coinage series (since they had to circulate alongside the former), are none the less the proper concern of this Society.

In commenting on the papers we have heard in the year, I try to proceed in a more or less chronological manner and so I must next, I think, mention Mr John Brand's paper of last February entitled 'Scruples' even though this ranged, in his continuing review of numismatic metrology, from Roman to comparatively modern times. This is perhaps, more than any other, a field where a nice judgement needs to be exercised if deliberate changes in weights and relationships are to be distinguished from those that arose through a process of gradual mutation, and the risks of pursuing a too great degree of precision are as great as those of not being precise enough. One feels that Mr Brand has probably got this right but, in such a closely argued subject, we must look forward to the publication of his conclusions before coming to a final judgement.

We had two evenings of short papers, one for the period pre-1500 in June and one for the period after 1500 in April. At the former, Mr G. C. Boon gave us a preliminary note on the remarkable find which had just been made in Cardiff of pennies of the Empress Matilda; Mr M. A. S. Blackburn talked on finds from the Lincoln excavations; Mr G. P. Gittoes read us a note on the Short-Cross series entitled 'When is a mint-signature not a mint-signature'; Mr R. Merson proposed an ingenious attribution of certain coins of Brittany to Edward III; and Miss M. M. Archibald read a note on the 1980 hoard of forged Edward IV pence from Queenhithe. At the evening of post-1500 papers in April, we had also heard from Mr G. C. Boon on 'A Civil War hoard and Civil War mints'; Mr G. P. Dyer read a paper entitled 'The Elusive Counter Puncheon'; Mr P. J. Morley spoke on 'The Slough medalets of William Till'; and Mr M. J. Sharp addressed us on the early coins of Charles I.

Finally, at the end of my review, Mr Graham Dyer in October once more demonstrated quite decisively how much more is still to be learned from a scholarly study of the milled series. While Mr Dyer, as a member of the staff of the Royal Mint, undoubtedly enjoys the special benefits of ready access to mint records, his paper 'The Una and the Lion Five Pound Pieces' was a model of what can be done in this late field to increase our understanding of how the mint operated in the last century.

I feel sure you all share with me a sense of appreciation for the hard work of those who contributed to our programme in the year and, on your behalf, I once again offer them our thanks.

Publication of the Journal

The 1978 *Journal* was received by members early in 1980 and the 1979 *Journal* should be in members' hands early in 1981.

I have to report a change of editors. Regretably, Mrs Peggy Delmé Radcliffe resigned during the summer and Mr Nicholas Mayhew will give up his editorship once he has seen the 1979 *Journal* safely through the press. We are most grateful to Dr Christopher Challis for agreeing to undertake the task of editorship—he already has experience in publishing a learned journal and we feel that he will be of great assistance to the Society in this capacity. I should like to state my sincere appreciation of the work of the outgoing editors. Not only did they exert themselves considerably to bring our publication programme up to date, but it was during their period of office that vital changes were made to improve the economics of the *Journal*; changes that involved extended communications with Oxford University

Press, extra meetings of the editorial committee, negotiations with advertisers, and many other tasks. We owe them our special thanks for their vital and valuable efforts.

Finances

It is three years since the subscription rate was last increased and our main expense, printing costs, in common with other costs for labour-intensive items, have advanced massively each year. We have felt that it is important to adhere to the principle of producing a single *Journal* each year. Not only is it generally desirable for all our members to have one volume per subscription, but we should certainly run into difficulties with our many institutional members if in any one budget year they had to pay a subscription without a volume to show for it. We have also felt that it is essential to keep the Society in a sound state financially. The last increase, effective from 1 January 1978, taken together with the economies made in *Journal* production, and the income resulting from the sale of advertising space in the *Journal*, has been sufficient to cover our costs up to this year 1980. If we do not increase our income with effect from 1 January 1981, we shall publish the 1981 *Journal* at a loss, and if we allowed this to happen we should quickly eat up our reserves, and the secure position we obtained as a result of members' response to my appeal in 1977 would be thrown away.

Accordingly, as you have seen from the voting paper and from my letter that accompanied it, Council have felt it imperative to propose an increase for ordinary members from £12 to £18, with corresponding adjustments for junior and overseas members.

Every time we increase our subscription we experience difficulties because some members forget to change their banker's order, and if changes are frequent there can be a considerable tangle of payments at various rates, some right, some wrong, all of which require correspondence to sort out—a heavy burden for our voluntary unpaid officers. For this reason it is desirable to avoid very frequent changes and we aim to make an increase sufficient to cover our needs for at least three years. This is why, as you will have seen from my letter, we are asking for £18 per annum, when, for 1981 alone, £15 per annum might have been enough. Of course, whether we have correctly predicted the future path of inflation is a little matter over which we (and a good many others *much* better placed to judge) have little control.

We can at least say to our members that our subscription increase of 50 per cent over three years compares favourable with printing-cost increases of around 20 per cent per annum and you will, I am sure, have not failed to notice that over the same period prices of coins and books have shown no less an increase and in many cases more.

With the increase proposed, I can say with confidence that the Society's financial affairs will continue to move forward on a thoroughly sound basis that will ensure its continuing ability to meet its commitments to members. There is, of course, one other means of making your subscription worth more to the Society, and that is by entering into a covenant to subscribe for at least seven years. If you do this the Society receives from the Inland Revenue the tax that had been deducted from that part of your income which your subscription represents. Please consider doing this, it would be of great assistance.

Finally, under this heading of Finances, I should like to express my sincere thanks to our Treasurer, Mr Robert Seaman, for his continuing work for the Society during the year. I have always felt that we have been very fortunate to have such a competent and reliable person in this key position, and I have been very grateful during my presidency for his willingness to continue.

The Joint Library

As has now become his custom our librarian, Mr Thompson, has provided me with an annual report. From this, I can see that loans to members have numbered 635 compared with 610 in 1979, continuing the growth in the use of this valuable asset.

Books purchased for the library have been *Coinage of the Americas*, edited by Buttrey; *Studies on Money in early America*, including Newman on American circulation of English and Bungtown half-pence; the reprint of Neumann, volume 4, on English tokens; the *Catalogue of the Hilary F. Guard Collection of Manx Coinage*; and Lincolnshire Museums information sheets, numismatic series, nos. 1-3. A new exchange with the Akademia Nauk now brings *Soviet Archaeology* to the library, and in a continuing exchange with Poland the reprint of Snelling's *View of 1766* has been sent for a volume received last year, and Burnett's *Coins of Late Antiquity* has been sent for a volume edited by Kunisz on money and money economy in Antiquity and the Middle Ages.

Donations have included various offprints from Mr Talvio; 'Linked rings' from Mr McBride; *La circulación monetaria en Polonia* from Dr Mikolajczyk; *The Gold Sovereign* from Mr Marsh; a note on a Farnham seventeenth-century token issuer from Mr Merson, who has also given copies of Numismatic Society of Ireland Occasional Papers 17 and 18, two working papers for the International Congress of Accounting Historians, and Morris, *Treasure Trove Island*. Mr Seaman has given the catalogue of Roman coins in the Courtauld collection, Zimbabwe. Also donated have been a collection of portraits on Polish coins and banknotes; *Cantium* with Mr Leach on the Sheppey hoard; the new *Newsletter* from the International Numismatic Commission; and, most generously, from Mr Entwisle of Bolton, a bound photocopy of a manuscript version of Lord Harington's Patent for farthing tokens.

From the publishers have come copies of *Danefæ* on Danish treasure trove; *Winchester Studies* 3 on Lankhills Roman cemetery; and fascicule 16(1) of the *Catalogue of Coins from the 9th-11th Centuries found in Sweden*.

As in previous years, the librarian has updated our entries in various directories and submitted a list of the contents of the latest *Journal* for the *British Humanities Index*. Correspondence from many sources on a wide variety of subjects has been dealt with, and in doing this the librarian particularly acknowledges the assistance given to him by Mr Merson. To this I should like to add my own thanks and appreciation, not only to his helpers but to the librarian himself. Most officers of the Society are able to carry out their functions at home but the librarian has to spend part of his time in the library. I know that this can present considerable difficulties at times and that it is not always easy to keep up with the work.

Coin Hoards

I should like to thank Miss Archibald for again providing me with a list of hoards found in Britain since my last address. Miss Archibald has asked me to acknowledge the help of Mr Boon who provided information on the hoards from Wales that are included. I must also acknowledge Mrs Murray's kindness in providing information on the Leith hoard. We have a record crop this year, thirteen Roman hoards and thirteen medieval and modern ones. I have tried to arrange them in chronological order by date of deposit, so far as this is known.

The Roman hoards are as follows:

Mildenhall, Suffolk	258 \mathcal{A} denarii. Republic to Titus. Deposit c.81
Banray, Cambridgeshire	5 \mathcal{A} denarii. Diocletian to Marcus Aurelius. Deposit c.180.
Aylesbury, Buckinghamshire	2 \mathcal{A}
Sprotborough, W. Yorkshire	8 \mathcal{A} antoniniani. Salonina to Claudius II. Deposit c.270
Edlington Wood, Yorkshire	18 \mathcal{A} antoniniani. Galienus to Tetricus. Deposit c.273
Market Deeping, Lincolnshire	c. 2,000 Bi. and \mathcal{A} antoniniani. Severus Alexander to Tetricus. Deposit c.273
East Mersea, Essex	333 \mathcal{A} antoniniani. Galienus to Tetricus. Deposit c.273
Monkton Farleigh, Wiltshire	c. 3000 Bi and \mathcal{A} antoniniani. Valerian to Probus. Deposit c.282
Childs Ercall, Shropshire	2,700 \mathcal{A} antoniniani. Galienus to Probus. Deposit c.282
Upavon, Pewsey, Wiltshire	111 \mathcal{A} folles. Diocletian to Galerius. Deposit c.311
Osournby, Lincolnshire	22 \mathcal{A} siliquae. Constantius II to Eugenius. Deposit c.394
Barton-upon-Humber, Sth. Humberside	283 \mathcal{A} siliquae. Constantius II to Honorius. Deposit c.400
Hovingham Park, N. Yorkshire	18 \mathcal{A} siliquae. Constantius II to Honorius. Deposit c.400

The medieval and modern are as follows:

Coed-y-Wenallt, S. Glamorgan	102 \mathcal{A} mostly Matilda, Countess of Anjou. Deposit c.1150
Rumney, Gwent	64 \mathcal{A} Edward I-II
Leith, Lothian	358 \mathcal{A} and billon of which 348 are Scottish, Robert III to James III, and 10 are English, Edward III to Edward IV
Queenhithe, London	495 Bi. False pennies of 'Henry VI'. Deposit c.1500
Streatley, Berkshire	47 \mathcal{A} Edward IV, possibly some earlier. Deposit c.1475
Wheatley, Oxfordshire	2 \mathcal{A} , Frankfurt gold gulden France, Louis XI Ecu
Bearpark, Durham	2 \mathcal{A} , scudo of Pius V of Bologna. France, Francis I Ecu
Water Orton, West Midlands	1 \mathcal{A} , 25 \mathcal{A} . Henry VII to James I

Glascoed, Gwent	11 £R. Philip and Mary to Charles I
Maidford, Northants	40 £R. Elizabeth I to Charles I
Taunton, Somerset	235 £R. Civil War
Bank of England, London	4 A and 1747 £R deposited in the Bank in 1725
Keighley, W. Yorkshire	13 £R. George III to Victoria

Ladies and gentlemen, this brings me to the end of the first part of my address which is the final one of my presidency. While I have already acknowledged the contribution of several of our officers in the appropriate parts of my address, I should like now to add my special thanks to Mr Wilfrid Slayter, our indefatigable secretary.

I should also like to say a special word of thanks to Mr John Brand for the time and trouble he has taken over the Society's affairs over the past year in areas which are outside what are usually regarded as the normal duties of a Director. Included amongst these activities have been matters connected with the Bibliography of British Numismatics, now well in hand, the Joint Library, and the next International Congress; all things which will benefit the Society in the future.

There have been comparatively few changes to the officers of the Society during my presidency and I have always felt myself to be at the head of a very harmonious and co-operative team. To those who have served with me on Council and to all our members I should like to offer my thanks for the excellent support I have received. I do not exaggerate when I say that without this we could not have counted, in these difficult times, upon the survival of the Society in the form we know it.

(Following the declaration of the results of the election for Officers and Council for 1981, the President delivered the second part of his address which was entitled 'The "star" halfpence and farthings of 1335'.)

REPORT OF THE AUDITORS TO THE MEMBERS OF THE BRITISH NUMISMATIC SOCIETY

We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit. In our opinion proper books of account have been kept by the Society so far as appears from our examination of those books. We have examined the attached Balance Sheet and annexed Income and Expenditure Account which are in agreement with the books of account and no credit has been taken for subscriptions in arrear. In our opinion and to the best of our information and according to the explanations given to us, the Balance Sheet gives a true and fair view of the state of the Society's affairs as at 31 October 1979 and the Income and Expenditure Account gives a true and fair view of the Income and Expenditure for the year ended on that date.

FUTCHER HEAD & GILBERTS
Chartered Accountants

Astral House
125-9 Middlesex Street
Bishopsgate
London E1 7JF
12 June 1980

Balance Sheet as at 31 October 1979

1978 £		£	£	£
	ASSETS			
	INVESTMENTS at cost			
6,000	£6,000 City of Cambridge Stock		6,000-00	
	J. SANFORD SALTUS MEDAL FUND			
200	Cash at Bank on Deposit		200-00	
	SCHNEIDER RESEARCH FUND			
167	Cash at Bank on Deposit		167-00	
150	LIBRARY at cost, less amounts written off		150-00	
10	FURNITURE at cost		10-00	
453	DEBTORS		—	
	CASH AT BANKERS AND IN HAND			
542	Bank—Current Account	464-69		
6,957	—Deposit Account	8,830-89		
—	In hand	22-46	9,318-04	
14,479				15,845-04
	Less LIABILITIES			
75	SUBSCRIPTIONS RECEIVED IN ADVANCE		72-54	
209	SUNDRY CREDITORS AND OUTSTANDING CHARGES		231-60	
	J. SANFORD SALTUS MEDAL FUND			
200	Capital Account		200-00	
	SCHNEIDER RESEARCH FUND			
167	Capital Account		167-00	
	JOURNAL PROVISIONS			
	1978 (Provision towards Cost)	6,000-00		
11,511	1979 (Provision towards Cost)	7,000-00		
			13,000-00	
12,162				13,671-14
<u>£2,317</u>	NET ASSETS			<u>£2,173-90</u>
	<i>Financed by:</i>			
	GENERAL PURPOSES FUND			
	Balance at 1 November 1978		2,316-83	
	Less Excess of Expenditure over Income for the year		142-93	
<u>£2,317</u>				<u>£2,173-90</u>

Income and Expenditure Account for the year ended 31 October 1979

1978 £		£	£	£
	INCOME			
5,443	Subscriptions received for 1979			5,211·99
170	Subscriptions in arrear received during the year			181·79
1,187	Income Tax repaid			—
11	Entrance Fees			15·39
1,150	Donations			45·62
416	Interest received			1,019·29
583	Sale of Publications: Back Numbers			402·20
33	Premium on redemption of 8½% British Savings Bonds			—
3,255	Proceeds of Auction			—
				<hr/>
12,248				6,876·28
	<i>Less EXPENDITURE</i>			
230	Printing, Postage, and Stationery		283·65	
33	Expenses of Meetings, Rent, and Library facilities		84·89	
242	Sundry Expenses		280·08	
111	Sanford Saltus Medal		—	
	Journal Expenses:			
	1977 <i>Journal</i>			
	Cost	5,010·03		
	<i>Less</i> Previous			
	Provision	5,511·44		
		<hr/>	(501·41)	
	1978 <i>Journal</i>			
	Cost	6,022·00		
	<i>Less</i> Previous			
	Provision	6,000·00		
		<hr/>	22·00	
	Provision towards cost of 1979 <i>Journal</i>		7,000·00	
			<hr/>	
9,315			6,520·59	
—	<i>Less</i> British Academy Grant		150·00	
			<hr/>	
9,931			6,370·59	7,019·21
				<hr/>
<u>£2,317</u>				<u>(£142·93)</u>

(Signed) R. J. SEAMAN
Hon. Treasurer
P. WOODHEAD
President

24 June 1980

SERIES SUMMARY INDEX

VOLS. XLI-L (1972-1980)

PETER MORLEY

Abbreviations: c. century; *exh.* exhibited, exhibition(s) (by); *obit.* obituary (*of*); *pl(s).* plate(s); *rev.* review of, reviewed.

Omissions: Accounts, elections within the Society, and other regular features; subject entries for most reviews. Deaths, exhibitions, readers and their subjects, reviews, are entered under their individual headings, as also are finds, with references from Finds ... according to the series and date of the material. Find-spots in the British Isles are identified by county.

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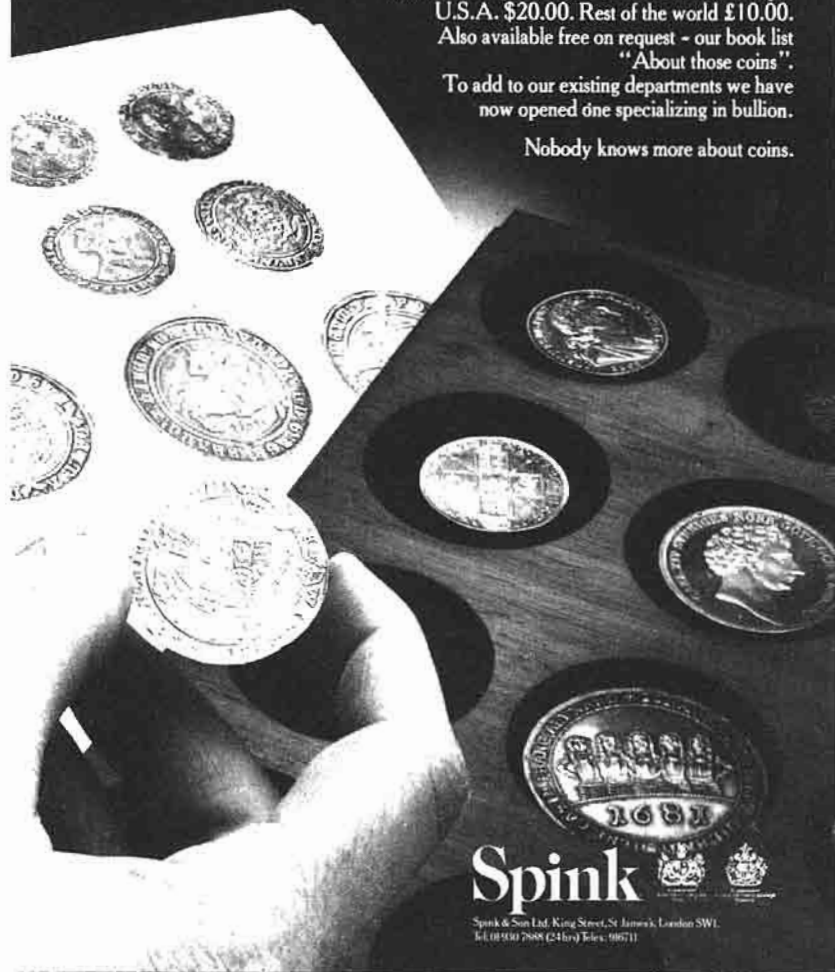
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